THE ANNUAL REPORT OF

THE RADIATION ADVISORY COMMITTEE

FOR THE FINANCIAL YEAR ENDING JUNE 2018

RADIATION ADVISORY COMMITTEE

Melbourne, Australia

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The Hon Jill Hennessy MP
Minister for Health
Minister for Ambulance Services

Dear Minister

Pursuant to Section 110 of the *Radiation Act 2005*, the Radiation Advisory Committee submits the 2018 annual report of the Committee for presentation to Parliament.

Yours faithfully

Dr Joanna Lia Wriedt
Chair
RADIATION ADVISORY COMMITTEE

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RADIATION ADVISORY COMMITTEE

The Radiation Advisory Committee (the Committee) is established under Part 10 of the *Radiation Act 2005*. The term of appointment for the Committee is the period 17 August 2017 to 16 August 2020.

(i) Composition

The Committee met on 5 occasions from July 2017 to June 2018.

A new Committee was appointed for the period from 29 August 2017 to 16 August 2020. The outgoing Committee met only once in the 2017-2018 financial year.

The members of the outgoing Committee for the period from July 2017 to August 2017 were:

Dr Dean Morris **(Chair)** Head of Operations Australian Synchrotron **Meetings attended: 1**	**Dr David Bernshaw** Consultant Radiation Oncologist Peter MacCallum Cancer Centre **Meetings attended: 0**
Mr Russell Booth Chief Nuclear Medicine Technologist Medical Imaging Department St Vincent's Hospital **Meetings attended: 1**	**Dr Ray Budd** Consultant Medical Physicist **Meetings attended: 1**
Dr Roslyn Drummond Radiation Oncologist Peter MacCallum Cancer Centre **Meetings attended: 0**	**Professor Robert Gibson** Radiologist Royal Melbourne Hospital **Meetings attended: 1**
Dr Russell Horney Physicist Department of Medical Imaging and Radiation Sciences Monash University **Meetings attended: 1**	**Dr Ken Joyner** Director Joyner and Associates Telecommunications Consultancy **Meetings attended: 1**
Mr Paul Marks Senior Medial Radiation Scientist Australian Radiation Protection and Nuclear Safety Agency **Meetings attended: 1**	**Mr Christopher Perry** Chief Radiographer EMI Radiology East Melbourne **Meetings attended: 1**
Mr Paul Tomlinson Senior Technician ALS Industrial **Meetings attended: 1**	**Dr Joanna Lia Wriedt** Physiologist, Epidemiologist and Lawyer **Meetings attended: 1**

The members of the Committee for the period from 29 August 2017 to 30 June 2018 were:

Dr Joanna Lia Wriedt **(Chair)** Physiologist, Epidemiologist and Lawyer **Meetings attended: 4**	**Dr David Bernshaw** Consultant Radiation Oncologist Victorian Comprehensive Cancer Centre **Meetings attended: 1**
Dr Ken Joyner Director Joyner and Associates Telecommunications Consultancy **Meetings attended: 4**	**Dr Roslyn Drummond** Radiation Oncologist Victorian Comprehensive Cancer Centre **Meetings attended: 3**
Associate Professor Eddie Lau Radiologist and Nuclear Medicine Specialist Austin Health **Meetings attended: 4**	**Mr Geoffrey Dick** Deputy Chief Radiographer and CT Supervisor Medical Imaging Angliss Hospital Eastern Health **Meetings attended: 3**
Dr Zoe Brady Chief Physicist Alfred Radiology and Nuclear Medicine Department Alfred Health **Meetings attended: 3**	**Ms Min Ku** Professional Standards Manager Australian Society of Medical Imaging and Radiation Therapy **Meetings attended: 4**
Dr Stephanie Keehan Medical Physics Registrar Peter MacCallum Cancer Centre **Meetings attended: 4**	**Mr Simon Toomey** Business Manager/Consultant Health Physicist SGS Australia Pty Ltd **Meetings attended: 4**
Dr Fiona Charalambous Science Officer, Waste Safety Australian Radiation Protection and Nuclear Safety Agency **Meetings attended: 4**	**Dr Tomas Kron** Director of Physical Sciences Peter MacCallum Cancer Centre and University of Melbourne **Meetings attended: 2**

(ii) Responsibilities

The Committee is to advise the Minister for Health or the Secretary of the Department of Health and Human Services, on any matters relating to the administration of the *Radiation Act 2005*, referred to it by the Minister or the Secretary including the following:

(a) The promotion of radiation safety procedures and practices.

(b) Recommendation of the criteria for the licensing of persons and the qualifications, training or experience required for licensing.

(c) Recommendation of which radiation sources should be prescribed as prescribed radiation sources.

(d) Recommendation of the nature, extent and frequency of tests to be conducted on radiation apparatus and sealed radioactive sources.

(e) Codes of practice, standards or guidelines with respect to particular radiation sources, radiation practices or uses.

Section 110 of the Radiation Act requires that the Committee must give the Minister a report on its activities during a financial year no later than 1 November following that year.

The terms of reference for the Committee are provided in Appendix 1.

1. Introduction

Throughout the year a number of issues were considered by the Committee including:

- Radiation stakeholder engagement.
- The regulatory requirements for various ionising radiation practices, including:
    a) Licensing requirements in relation to medical radiation oncology.
    b) Licensing requirements in relation to dual energy X-ray absorptiometry (DEXA) units.
    c) Licensing requirements in relation to technetium-99m (^{99m}Tc) generators.
- Non-ionising radiation matters.

The Committee continues to pay close attention to the use of and developments in the use of ionising radiation in the medical and the non-medical fields due to the risks associated with exposure to ionising radiation. These risks need to be balanced by the positive benefits associated with the use of ionising radiation.

The Committee would like to thank the Radiation Team of the Department of Health and Human Services, in particular Mr Morrie Facci, for its continuing assistance and support.

2. Ionising radiation

2.1 Radiation Regulations 2017

The Committee noted that the *Radiation Regulations 2017* came into operation on 27 August 2017.

The main changes in the Radiation Regulations 2017 are:

- Requirements related to strengthening security of high consequence radioactive material.
- Lowering of the limit for exposure to ionising radiation to the lens of the eye for radiation workers, in line with 2011 recommendations of the International Commission on Radiological Protection.
- Elimination of the fee associated with applying for a variation to an existing licence and transferring an existing management licence.
- Placing enclosed X-ray analysis units into a different fee category.
- Placing dental 3D Volumetric X-ray units into a different fee category.

2.2 Radiation stakeholder engagement strategy

The Victorian Auditor General made a number of recommendations in March 2015 to improve regulation within the department in a report entitled 'Managing Regulator Performance in the Health Portfolio'.

These recommendations are summarised in the Committee's annual report for 2015 available at: https://www2.health.vic.gov.au/public-health/radiation/radiation-regulatory-framework/radiation-laws/radiation-advisory-committee

The Committee was advised that, in response to the recommendation of the Victorian Auditor General's Office that the department should establish and apply appropriate stakeholder engagement strategies, the department would seek to engage more with stakeholders.

The aim of the department's engagement strategy is to ensure that stakeholders are informed of matters pertaining to radiation safety, in particular their own responsibilities under the Radiation Act 2005 and the roles and functions of the department in relation to the regulation of radiation sources in Victoria. Both external and internal stakeholder groups will be targeted as part of the stakeholder engagement strategy.

The objectives of the stakeholder engagement strategy are to:

- raise stakeholder awareness of the role of government in relation to radiation regulation and incident response;
- improve licence holders' awareness of their obligations related to compliance and the identification and management of the safety and security risks associated with their activities; and
- strengthen engagement with stakeholders to improve collaboration in the development of legislation, standards, codes and other materials; and to facilitate and improve the preparation and response to radiation incidents.

A draft of the first newsletter produced by the department as a part of the stakeholder engagement strategy was considered by the Committee and the Committee made a number of suggestions as to how the newsletter could be improved.

2.3 Code for Radiation Protection in Planned Exposure Situations (2016)

The Committee was advised that the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) had published *RPS C-1 Code for Radiation Protection in Planned Exposure Situations (2016).*

The code sets out requirements in Australia for the protection of occupationally exposed persons, the public and the environment in planned exposure situations. The primary means of controlling exposure in planned exposure situations is by good design of facilities, equipment, operating procedures and through training.

The code is not intended to apply to existing exposure situations, emergency exposure situations, other than where the emergency situation arises from the planned activity, or exposure of a person to radiation received as a patient undergoing medical diagnosis or therapy, as a volunteer in medical research, or non-occupational exposure received as a consequence of assisting an exposed patient. These exposure situations are to be dealt with by the Guide for Radiation Protection in Existing Exposure Situations (2017) (see 2.6 below), the guide for emergency radiation exposures (see 2.5 below) or, in the case of medical exposures, by the *Code of Practice for Radiation Protection in the Medical Applications of Ionizing Radiation (2008)* and supporting safety guides published by ARPANSA.

The Committee was advised that the department was developing licence holder compliance requirements in relation to the *Code for Radiation Protection in Planned Exposure Situations* as part of a national regulatory project. These compliance requirements would be developed taking into account the need for a graded approach to radiation safety as recommended by the International Atomic Energy Agency. It is intended that compliance with the code would eventually become a regulatory requirement through department initiated variations to existing radiation management licences.

2.4 Guide for Radiation Protection in Existing Exposure Situations (2017)

The Committee was advised that ARPANSA had published *RPS G-2 Guide for Radiation Protection in Existing Exposure Situations (2017).* This guide establishes a framework for the protection of occupationally exposed persons, the public and the environment in existing exposure situations. Such situations include contamination of areas by residual radioactive material deriving from past activities that were never subject to regulatory control, exposures to radon gas and radon gas progeny and exposure from radionuclides of natural origin.

2.5 Draft ARPANSA codes and guides

The Committee was advised that ARPANSA had prepared a draft code for Radiation Protection in Medical Exposure (the medical code). The medical code is intended to replace the existing *RPS14 Code of Practice for Radiation Protection in the Medical Applications of Ionizing Radiation (2008)* published by ARPANSA. The medical code was released for public consultation which closed on 25 May 2018.

The Committee was also advised that the department would organise a workshop for stakeholders to discuss the issues regarding the implementation of the code. The workshop was held on 16 May 2018.

The department will consider the medical code, when published, in developing any new conditions on licences authorising medical radiation practices.

The Committee was advised that ARPANSA had prepared a draft Guide for Radiation Protection in Emergency Exposure Situations. Conceptually there were three users of the document: government, regulators and individual organisations. The guide was released for public consultation which closed on 15 June 2018. The guide is currently being re-drafted into three different documents: RPS G-3 Part 1 – The Framework; RPS G-3 Part 2 – Planning and Preparedness; and RPS G-3 Part 3 - Response and Transition.

The department advised the Committee that it intended to conduct a workshop in 2018, involving other emergency agencies, to discuss the Guide for Radiation Protection in Emergency Exposure Situations and what it would mean for response to radiation emergencies.

The Committee was advised that the ARPANSA Code for Disposal of Solid Radioactive Waste (RPS C-3) was released for public consultation.

The Committee was advised that the Code for Radiation Protection Requirements for Industrial Radiography (RPS C-4) was released for public consultation. At the March 2018 meeting of the Radiation Health Committee (RHC) of ARPANSA, RPS C-4 was endorsed for publication.

The Committee was advised that the Code for Disposal of Radioactive Waste by the User was endorsed for publication at the March 2018 RHC meeting.

The Committee was advised that the Code for Maximum Exposure to Radiofrequency Fields – 100kHz to 300GHz (RPS3) was being revised.

The Committee was advised that an existing draft of the Fundamentals for Protection Against Non-Ionising Radiation will be reviewed during 2018.

2.6 New radon dose conversion coefficients

The committee was advised that the International Commission on Radiological Protection (ICRP) published revised dose conversion coefficients for radon progeny in occupational exposure situations. Converting exposures to radon progeny into doses requires the use of these dose conversion coefficients. The new conversion coefficients are approximately double the previous values, which results in proportionate increases in estimated radiation doses for occupational exposure situations. ARPANSA has produced an advisory note on the new dose conversion coefficients for radon progeny available at:
https://www.arpansa.gov.au/understanding-radiation/sources-radiation/radon/new-dose-coefficients-radon-progeny-impact-workers.

2.7 Radiation Act Annual Report for the financial year ending 30 June 2017

Section 134 of the Radiation Act requires that the Secretary publish a report for each financial year that:

- describes the activities of the Secretary under the Radiation Act 2005
- includes a summary of all authorities issued, renewed, suspended, cancelled, varied, transferred or surrendered during that year
- includes all radiation incidents investigated in that year
- includes a summary of all prosecutions for offences against the Radiation Act or the Radiation Regulations commenced in that year.

The Committee was provided with a copy of the Radiation Act Annual Report for the financial year 2016 -2017 for information.

2.8 The department's new radiation licensing database

The Committee was advised that the current radiation licensing database used by the department to manage the administration of over 16,500 licences was well over 14 years old. It was built to work with an old operating system and does not fully meet the department's current needs. As such, the department was introducing a new radiation licensing database during 2018.

2.9 Licensing of radiation oncology medical physicists to use high dose rate brachytherapy equipment

The Committee was advised that the department had received a number of applications from Radiation Oncology Medical Physicists (ROMPs) wishing to use high dose rate brachytherapy equipment for the purpose of medical radiotherapy.

The Committee noted that this issue had been discussed at a Committee meeting in June 2004 and that a guidelines document for intravascular brachytherapy had been developed by the Radiation Team of the department in conjunction with the Committee. The Committee considered this document so that it could come to an informed position in relation to licensing of ROMPs for the treatment of patients. The Committee also considered the position of other jurisdictions regarding their licensing requirements in relation to high dose rate brachytherapy. The majority of the other jurisdictions only permitted ROMPs to use high dose rate brachytherapy equipment for medical physics and quality assurance purposes.

The Committee recommended that a team consisting of radiation oncologist, radiation therapist and radiation oncology medical physicist should work together in the application of high dose rate brachytherapy. The Committee was advised that in order to make a requirement for such a team to be present mandatory, changes would need to be made to relevant management licences.

The Committee noted that, in June 2004, the Radiation Advisory Committee indicated that its preference in relation to the licensing of ROMPs was for the department to implement the approach adopted in NSW, i.e. allow ACPSEM certified ROMPs to operate brachytherapy devices to treat patients under the supervision of an oncologist. The present Committee recommended that this approach should be adopted in the present case.

2.10 Use of dual-energy X-ray absorptiometry (DEXA) for assessment of body composition

The Committee was advised of an apparent increase in the use of DEXA for assessment of body composition (such as fat and lean mass) with very little or no consideration for clinical indications, particularly amongst persons concerned with body image.

The Committee noted that the radiation doses involved in DEXA scans are very small (0.001 - 0.01 mSv) but did not consider that such use of DEXA was justified.

The department advised the Committee that management licences authorising the possession of medical imaging equipment had conditions placed upon them which included a requirement that the management licence holder have a system in place to ensure justification of medical procedures by a Radiation Medical Practitioner (usually a Radiologist) as required by *RPS14 Code of Practice for Radiation Protection in the Medical Applications of Ionizing Radiation (2008)* published by ARPANSA.

Committee members were aware of Radiologists who had been pressured by DEXA scan businesses to generically justify DEXA body composition procedures in order to satisfy current requirements under the RPS14. Committee members were also aware of Radiologists who had refused to generically justify the use of DEXA for monitoring of exercise programs and weight loss based on the view that these types of procedures are not justified, a view reflected in the statement on DEXA scanning from the Radiation Health Committee of ARPANSA (June 2016).

The department proposed a draft management licence condition in respect of DEXA, for comment by the Committee. The draft condition prescribed the clinical indications for which the use of DEXA for the assessment of body composition is appropriate. The clinical indications proposed in the condition were adopted from the International Society for Clinical Densitometry, Official Positions 2015.

The Committee advised that body composition scans are sometimes performed as part of bone mineral density (BMD) scans in obese patients. The Committee noted that the proposed condition for DEXA units would introduce requirements that are different to those imposed on BMD scans, which could cause confusion. However, the Committee noted that the number of these types of BMD scans is likely to be low.

Education of the public about the risks associated with DEXA scans was flagged by the Committee as an alternative to imposition of the proposed condition. However, the Committee also suggested that individuals who undergo DEXA scans for the purpose of monitoring an exercise program and weight loss are not likely to perceive the risks in a way that would deter them from seeking DEXA scans.

The Committee observed that the department needed to be conscious of the flow on effects that could result from lack of effective regulation of low dose but high volume practices such as DEXA.

The department advised that it would take the Committees views into consideration in the regulation of these DEXA practices.

2.11 Mammography quality assurance (QA) standard

The Committee was advised that the department's existing radiation safety standard for mammography X-ray equipment was published in 2007. However, since image receptor technology used in mammography X-ray equipment has evolved significantly since the standard was published, the existing standard does not adequately address the need to ensure the required image quality needed for reliable diagnosis in modern mammography X ray equipment.

The department developed a draft radiation safety standard for mammography X-ray units which is intended to replace the existing standard. The standard covers mammography X-ray units that utilise DR (Digital Radiography) including tomosynthesis, CR (computed radiography) and Plain Film image receptors.

The draft standard is largely based on the Australasian College of Physical Scientists & Engineers in Medicine (ACPSEM) Position Paper *Recommendations for a digital mammography quality assurance program V4.0* (issued on 21 July 2017), which has been adopted as a basis for the quality assurance programs of both the Royal Australian and New Zealand College of Radiologists (RANZCR) and BreastScreen Australia.

The department sought the advice of the Committee as to whether mammography assisted breast biopsy should be considered a diagnostic use of mammography and therefore to be covered by the standard. The Committee did consider such use as diagnostic.

The Committee advised the department that it needed to ensure that the department standard was aligned with the ACPSEM standard as much as possible. The Committee also considered it advisable to include a requirement for retesting of mammography units when the X-ray tube or the digital detector (in the case of digital mammography) is replaced.

The Committee was advised that the introduction of the standard as a requirement would await agreement of a majority of states and territories on the requirements specified in the standard. A meeting of the jurisdictions was to be organised to facilitate this process.

2.12 Molybdenum-99 break-through from technetium-99m generators

The Committee was advised that a hospital contacted the department regarding a likely excess of molybdenum-99 (^{99}Mo) in a vial of technetium-99m (^{99m}Tc) pertechnetate, a problem generally referred to as "molybdenum break-through". A second hospital also reported an incident arising from the failure of a ^{99m}Tc pertechnetate product that may have been related to contamination of ^{99m}Tc pertechnetate with ^{99}Mo.

^{99m}Tc pertechnetate is produced by a ^{99}Mo/^{99m}Tc generator that contains a column of ^{99}Mo that is usually immobilised but decays to soluble ^{99m}Tc pertechnetate. When normal saline solution is poured over the ^{99}Mo column, the ^{99m}Tc pertechnetate is washed off and captured in a vial for use in the preparation of radiotracers used for diagnostic nuclear medicine procedures. The ^{99m}Tc pertechnetate washed off the column in the generator always contains a very small quantity of ^{99}Mo.

The department investigated this molybdenum break-through issue with a view to developing more prescriptive quality assurance requirements in relation to diagnostic radiopharmaceuticals. The Committee expressed support for improved quality assurance in nuclear medicine laboratories.

The Committee was advised that the department intended to place a condition on management licences authorising the possession of radionuclide generators. The management licence holder will be required to comply with the requirements specified in the document titled *Supplementary quality control requirements for radionuclide generators*, published by the department and available from the department's website. The document specifies the quality control requirements for radionuclide generators.

The Committee was supportive of this approach.

2.13 Australian Radiation Incident Register (ARIR) annual report for 2016

The Committee noted the ARIR annual report. The report contains details of radiation incidents that meet the criteria in the National Directory for Radiation Protection (NDRP), published by ARPANSA, that occurred in Australia in 2016. Incidents submitted to the ARIR are analysed and the results published to raise awareness of common hazards and to identify and promote practices which could prevent future incidents.

The Committee noted that, whilst there was an increase in the number of incidents involving medical uses of radiation, it would have been useful to have an indication as to the increase in the actual number of medical procedures.

3. Non-ionising radiation

3.1 Enforcement action taken by the Department of Health and Human Services in relation to illegal use of commercial tanning units in Victoria

The Committee noted that, on 1 January 2015, the department had cancelled all radiation management licences that authorised the possession of commercial tanning units. It is now an offence to possess or sell a commercial tanning unit, or conduct a commercial tanning practice (solarium). A person must not provide, or offer to provide the use of, a tanning unit, or operate or offer to operate a tanning unit for fee or reward.

The department continues to investigate the illegal use of commercial tanning units in Victoria with a view to prosecution of serious offenders.

The Committee suggested that banning the importation of the tanning beds and tanning bed components would help to eliminate the illegal use of tanning beds. The department advised the Committee that the matter of banning the importation of tanning beds had been raised at a national level but did not receive unanimous support from Australian jurisdictions.

3.2 Publications and journal articles reviewed by the Committee

Papadopoulou E, Haugen M, Schjølberg S et al. Maternal cell phone use in early pregnancy and child's language, communication and motor skills at 3 and 5 years: the Norwegian mother and child cohort study (MoBa). BMC Public Health (2017) 17; DOI 10.1186/s12889-017-4672-2.

The Committee noted that no evidence of adverse neurodevelopmental effects of prenatal cell phone use was reported.

Heuser G and Heuser SA. Functional brain MRI in patients complaining of electrohypersensitivity after long term exposure to electromagnetic fields. Rev Environ Health 2017; DOI 10.1515/reveh-2017-0014.

The Committee noted, among other matters, the small sample size and the lack of controlling for a number of confounders.

French Agency for Food, Environmental and Occupational Health and Safety report on electromagnetic hypersensitivity

The Committee noted that the French Agency for Food, Environmental and Occupational Health and Safety (ANSES) published the results of its expert appraisal on electromagnetic hypersensitivity (EHS) at the end March 2018. ANSES acknowledged that current scientific evidence shows no cause and effect link between the symptoms of EHS and electromagnetic fields and that it is only possible to identify EHS individuals by their self-reporting. Regardless of this ANSES stated that the suffering and pain of those who declare themselves as having EHS is real and has significant impact on their daily lives. ANSES recommended suitable training for health and social services professionals to ensure suitable care and counselling for people declaring themselves as having EHS and for better coordination between facilitators of their care. It was also highlighted that further research is needed and that it should be performed in

consultation with the EHS community. ANSES said that long-term funding is required for research on the health effects of electromagnetic fields including long-term studies performed under controlled experimental conditions.

L. Falcioni, L. Bua, E. Tibaldi, M. Lauriola et al. Report of final results regarding brain and heart tumors in Sprague-Dawley rats exposed from prenatal life until natural death to mobile phone radiofrequency field representative of a 1.8 GHz GSM base station environmental emission. Environmental Research (2018), https://doi.org/10.1016/j.envres.2018.01.037.

The Committee will maintain a watching brief on developments in this area.

National Toxicology Program (NTP) of the US Department of Health and Human Services animal study.

The Committee noted that this was the largest animal study looking at possible radiofrequency radiation effects on rats to date. The Committee discussed the draft report and peer review outcome of the study in which the NTP stated "the levels and duration of exposure to radiofrequency radiation were much greater than that which people experience with even the highest level of cell phone use, and exposed the rodents' whole bodies. So, these findings should not be directly extrapolated to human cell phone usage."

The Committee considered that this paper was important and would keep a watching brief on developments in this area.

3.3 5G mobile phone network

Dr Joyner gave a presentation to the Committee regarding the new 5G mobile phone network. 5G is the fifth generation of mobile networks enabling the connectivity of today's modern society, the Internet of Things (the interconnection via the Internet of computing devices embedded in everyday objects, enabling them to send and receive data) and future innovations. As demand for continuous connectivity grows, 5G will create an agile, purpose-built network tailored to the different needs of the community and economy.

3.4 The Committee's view on possible health effects of radiofrequency radiation

The scientific papers reviewed by the Committee during the year have not altered the Committee's position that there is no substantive evidence linking exposure to radiofrequency radiation to an increased risk of cancer or other adverse health events. However, in light of public concerns over mobile phones, base stations and smart meters the Committee will continue to review the relevant research.

3.5 The Committee's view on possible health effects of power frequency electromagnetic fields.

The Committee's position, based on the research reviewed by the Committee, is that there is no substantive evidence to conclude that exposure to normally encountered environmental levels of power frequency electromagnetic fields causes adverse health effects in humans. The Committee will continue to review relevant research in this area.

Appendix 1 - Terms of reference of the Radiation Advisory Committee

1. The Radiation Advisory Committee (RAC) is established under the Radiation Act 2005 and provides advice to the Minister for Health or the Secretary on protecting the health and safety of persons and the environment from the harmful effects of radiation, with a view to adopting best practice for radiation safety in Victoria.
2. The RAC may provide advice on matters including:
    - administration and amendments of the Radiation Act 2005 and the Radiation Regulations 2017;
    - licensing of persons and companies to use radiation sources and conduct radiation practices;
    - inspection and testing of radiation sources;
    - new radiation sources and technologies;
    - development, implementation and review of state and national codes, standards and guidelines;
    - transportation, storage and disposal of radioactive materials;
    - security of radioactive sources;
    - radiation incidents;
    - medical research proposals involving ionising radiation;
    - non-ionising radiation matters including:
        - solaria and their regulation;
        - health effects of radiofrequency electromagnetic fields (including mobile communications);
        - health effects of extremely low frequency (ELF) electromagnetic fields (including power frequency fields); and
        - lasers and intense pulsed light (IPL) sources.
    - the promotion and improvement of radiation safety in Victoria;
    - developments that impact on best practice for radiation safety; and
    - any other matter put to it by the Radiation Team of the department.
3. The RAC meets on the first Thursday of every second month, starting February.
4. The RAC may call an extraordinary meeting as required or upon request by the Department of Health and Human Services.
5. A minimum of five members constitutes a quorum for meetings of the RAC.
6. The RAC regulates its own proceedings.
7. The RAC may establish sub-committees and working groups to consider specific issues, and may recommend that the department engage additional expert contractors to support these entities.
8. From time to time the RAC may invite visitors to its meetings in order to hear submissions or information from them, or to take or ask questions.
9. Secretarial support for the RAC is provided by the Radiation Team.

10. The RAC will provide an annual report to the Minister for each financial year, no later than 1st November following that year.