



29 March 2023

Dr Roger Allison
Chair, Radiation Health and Safety Advisory Council
C/- Strategic Partnerships, Office of the CEO
619 Lower Plenty Road
Yallambie VIC 3085

Dear Dr Allison

Re: ARPANSA response to Council advice and recommendations since 2019

I would like to acknowledge the recent Radiation Health and Safety Advisory Council ('the Council') statements containing advice and recommendations on the role that ARPANSA should play relating to radiation protection and nuclear safety. In my new role as CEO of ARPANSA it is timely to formally respond to this advice. While regular updates on ARPANSA's ongoing work related to Council advice and recommendations were provided and noted at Council meetings throughout COVID-19, this letter is a formal response to Council advice between December 2019 and August 2022.

The COVID-19 pandemic presented unforeseen challenges to ARPANSA, requiring the Agency to respond flexibly in the face of uncertainty. During this extraordinary global event, the Agency was able to continue to make progress on work relating to the advice and recommendations made by Council on emerging issues and matters of major concern to the community. My response below provides a high-level reply to each statement.

A National Approach to Skin Cancer Prevention

The Council's letter of advice in December 2019 contained priority areas in promoting a national approach to skin cancer prevention.

The CEO of ARPANSA gave an update at the August 2021 and December 2021 Council meetings on the Agency's ultraviolet (UV) radiation work program with a focus on engagement and research. ARPANSA continues to increase community awareness of UV radiation issues through our role as a World Health Organisation (WHO) Collaborate Centre, collaborative agreements with the Cancer Councils of Australia and Australian universities, and support of the National Skin Cancer Committee. In 2022 ARPANSA experts, in collaboration with national experts, called for the phase out of exposing humans to UV radiation to test sunscreen effectiveness and published two peer reviewed publications in *Public Health Research and Practice* and *Trends in Analytical Chemistry* related to the effectiveness and compliance of sunscreens.

ARPANSA provides a large-range of high-quality laboratory, network and research services to the community that promote solar UV radiation protection and provide evidence-based information to inform UV radiation protection for workers and the public. To sustain and improve ARPANSA's UV radiation work program, ARPANSA places high importance on aligning our activities with a whole of government approach to UV radiation protection. To this end, Council's advice enables ARPANSA to raise the profile of this issue and continue to influence health policy and its funding through working with the Commonwealth Department of Health and our national partners.

Australian Naturally Occurring Radioactive Material (NORM)

On 9 November 2020 Council provided recommendations related to the improvement of national uniformity for the management of NORM within Australia and increasing Australia's influence, through ARPANSA, on the international policy setting and approach to the management of NORM.

The CEO of ARPANSA gave an update on the Agency's activities in relation to NORM at the August 2021 meeting. This highlighted our engagement with the International Atomic Energy Agency (IAEA) to develop NORM guidance and ARPANSA's contribution to reviewing the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). More recently ARPANSA has been working with industry to improve NORM management processes for offshore oil and gas decommissioning. This includes raising awareness for improved international guidance from the International Commission for Radiological Protection (ICRP).

An important feature of Council recommendations was a call for a nationally consistent application of the graded approach to regulation of NORM. It is vital that all stakeholders continue to align management of NORM using a risk-based approach. ARPANSA regularly works with national stakeholders to raise awareness, increase knowledge of NORM management and risks, and to influence improved international guidance. To ensure the effective and efficient regulation of NORM in Australia, ARPANSA will continue to lead the development of regulatory guidance for a graded approach to radiological risks, based on international best practice.

Investigating the public health impact of cosmetic non-ionising radiation (NIR) devices

On 16 August 2021 Council advised ARPANSA of its concern on the issue of safety of application of non-ionising radiation (NIR) to achieve a desired cosmetic outcome in the beauty therapy industry. Council also called for further targeted research to gathering high quality data on the health burden of injuries resulting from the use of cosmetic NIR devices.

ARPANSA has published national advice for consumers and treatment providers. However, aside from the ban on solariums, there is still no national approach to regulation of devices or services that use NIR for cosmetic purposes. Advances in technology mean that increasingly sophisticated devices using NIR are being introduced for cosmetic procedures. It is only with further research to determine the overall public health impact of cosmetic NIR devices that ARPANSA can support the development of evidence-based and risk informed regulation.

In 2022 ARPANSA experts published an article in *Public Health Research and Practice* that calls for more research into the health impact of NIR exposure from cosmetic treatments. ARPANSA has joined with Monash University to support a PhD candidate to further investigate injuries resulting from cosmetic application of NIR. This research is expected to commence in 2023 and supports ARPANSA's mission to protect Australians from the harmful effects of radiation.

Radiation exposure from increased medical imaging in Australia

In your letter dated 16 August 2021, Council considered the issue of radiation exposure to the Australian public from medical imaging procedures due to their rapid increase in use over recent years. The Council identified multiple possible drivers for this increase, and the role that ARPANSA could play in advancing research into medical imaging safety in Australia. To support the Council's consideration ARPANSA provided an analysis on computed-tomography (CT) scans of the lumbar-sacral spine for various age groups.

ARPANSA's National Diagnostic Reference Level Service (NDRLS) continues to provide free tools for conducting dose comparisons in medical imaging. Decadal trends in DRL data have demonstrated declining individual dose from relevant medical imaging procedures. It is important to recognize that DRLs are one of the steps in the overall process of optimization and in Australia have useful to support dose audit and practice review for promoting improvements in patient radiation protection.

ARPANSA will continue to provide and expand the NDRLS to meet the challenges of increased medical imaging procedures in Australia. To do this ARPANSA will ensure that the number of DRL surveys per category are sufficient to infer national characteristics per annual survey period. ARPANSA is also engaging with the Australian Commission on Safety and Quality in Healthcare (ACSQHC) in relation to the place of the DRL program within the Diagnostic Imaging Accreditation Scheme (DIAS) and to share information concerning broader issues of imaging justification, safety and quality.

Personal or other occupational (non-clinical) uses of laser technology

On 26 August 2021 Council provided recommendations in advancing the safety research around accidental exposure to lasers from personal or other occupational (non-clinical) uses in Australia. At the December 2021 and March 2022 Council meetings the CEO of ARPANSA provided an update on the Agency's current efforts in this area.

This includes raising public awareness directly through online marketplaces of existing Australian regulations and dangers associated with laser pointers, as well as publishing translated regulatory guidance directed at sellers that use online marketplaces. ARPANSA is also delivering an education program to Australia's supply-chain sector as part of a series of 2022 compliance training workshops. Additionally, ARPANSA has been supported by the Australian Competition and Consumer Commission (ACCC) in approaching online marketplaces about the sale of dangerous consumer laser products. ARPANSA will continue to explore ways to mandate existing standards through Commonwealth regulatory mechanisms, including the improved reporting of incidents.

Closing Remarks

ARPANSA, on behalf of the Australian Government, aims to protect the Australian people and environment from the harmful effects of radiation. I am committed to sustaining and improving the delivery of radiation protection in Australia and supporting the Agency's purpose. ARPANSA's role is diverse, with many integral and complex functions that align our resources and enable us to achieve our purpose. ARPANSA can only deliver its program of work with committed and motivated staff. I would like to take this opportunity to thank all ARPANSA staff for their dedication and their daily hard work they put into delivering our strategic activities and supporting the Agency's purpose.

Finally, I would like to thank you and the Council for your advice and recommendations, which will guide ARPANSA to provide informative, transparent and risk-based advice in radiation protection. I encourage Council to continue to understand, respond and advise me on emerging issues, to ensure that ARPANSA can continue to respond effectively and efficiently to improve radiation protection in Australia.

Please note that your advice and my response will be published on the ARPANSA website.



Gillian Hirth

CEO of ARPANSA