

Radiation Safety Amendment Regulation (No. 1) 2013

Explanatory notes for SL 2013 No. 288

made under the

Radiation Safety Act 1999

General Outline

Short title

Radiation Safety Amendment Regulation (No.1) 2013.

Authorising law

Sections 47 and 210 of the *Radiation Safety Act 1999*.

Policy objectives and the reasons for them

The objective of the *Radiation Safety Act 1999* (the Act) is to protect the people of Queensland, and the environment, from the harmful effects of particular sources of ionising and harmful non-ionising radiation, while recognising the beneficial uses of radiation.

In accordance with the object of the Act, the *Radiation Safety Amendment Regulation (No.1) 2013* (the Amendment Regulation) will provide greater protection from the harmful effects of ultraviolet radiation (UVR) used in commercial solaria (also known as commercial tanning units or sunbeds). A solarium exposes individuals to high intensity UVR in order to tan the skin.

Significant resources have been invested in public education programs about the dangers of tanning, including exposure to UVR, which is a known carcinogen. However, there is still a proportion of the community who continue to be frequent users of solaria. Of particular concern is the fact that the use of artificial UVR is in addition to the already intense levels of solar UVR exposure these individuals are subjected to by living in Queensland. While exposure to UVR from sunlight is recognised as the primary risk factor in the development of skin cancer, the available research also shows that artificial tanning involving exposure to high intensity UVR contributes to the risk of developing skin cancer. In order to protect the public from the harmful effects of UVR emitted by commercial solaria the Amendment Regulation provides for public access to commercial solaria to be phased out by 31 December 2014.

The possession of relevant solaria is currently banned through the combined effect of section 47 of the Act and section 64A of the *Radiation Safety Regulation 2010* (the Regulation). Section 47 of the Act specifies that a person must not possess, supply or use a radiation source that is prescribed under a regulation to be a banned radiation source. Section 64A of the Regulation, which was inserted in the Regulation in 2012, specifies that a relevant solarium (i.e. a solarium used for commercial purposes) is prescribed as a banned radiation source in relation to the possession of the relevant solarium. However, at the time section 64A was included in the Regulation, transitional arrangements were put in place to allow existing possession licensees to continue to have lawful possession of a relevant solarium, if they were allowed to possess the device under their licence at

the time the ban came into effect (section 97 of the Regulation). At that time, it was expected that existing possession licensees would begin to consider how they could diversify or adjust their business operations to manage the eventual phasing out of commercial solarium.

The current suite of amendments to the Regulation is an extension to the amendments introduced in 2012. They provide a clear end date by which all commercial solarium operations will cease to operate in Queensland. The inclusion of new sections 97 to 99 provide for the possession of relevant solarium in Queensland to be subject to the ban under section 64A of the Regulation. The ban will apply to a person currently allowed to possess commercial solarium under a possession licence as their licence ends, or by 31 December 2014, whichever occurs first.

Given the potential adverse health effects associated with the use of solarium, amendments have also been made to stipulate existing possession licensees will not be able to divest themselves of their relevant solarium to private citizens for their personal use or retain a relevant solarium for their own personal use.

Possession licensees will be able to divest themselves of a relevant solarium by relocating the device to a place outside of the State under section 25 of the Act or disposing of the device by making it permanently inoperable as detailed in section 27 of the Act. In addition, the Government has announced that commercial solarium operators (i.e. possession licensees) will have access to an incentive scheme, under which they will receive a set sum for each commercial solarium surrendered to the State prior to the expiry of their possession licence or 31 December 2014, whichever is the earlier. Consequently, the Amendment Regulation ensures that the chief executive is able to lawfully acquire and take possession of a relevant solarium that has been surrendered by a possession licensee. Such devices will be made permanently inoperable and disposed of appropriately.

Should a licensee fail to take action to divest themselves of the relevant solarium in their possession before their licence ends or 31 December 2014, they will be considered to be in breach of the ban on the possession of relevant solarium. Under such circumstances, the department will be able to take action under the monitoring and enforcement provisions of the Act (e.g. investigate the offence, seize the device, etc.).

The introduction of a total ban on the possession of commercial solarium in Queensland is consistent with the approach currently being considered by the Standing Council on Health (SCoH) and announced by other jurisdictions across Australia. New South Wales, South Australia, Victoria, Australia Capital Territory, Tasmania and the Northern Territory have also announced that a ban on commercial solarium will take effect from the end of 2014.

Achievement of policy objectives

The policy objective of the Amendment Regulation will be achieved by:

- introducing a suite of provisions to phase out the possession of commercial solarium in Queensland by 31 December 2014
- making a number of minor and consequential amendments to the Regulation.

Consistency with policy objectives of authorising law

The Amendment Regulation is consistent with the main objective of the *Radiation Safety Act 1999*, which is to protect persons and the environment from the harmful effects of particular sources of ionising radiation and harmful non-ionising radiation.

Inconsistency with policy objectives of other legislation

The Amendment Regulation is consistent with the policy objectives of other related legislation that aims to protect and promote public health, such as the *Public Health Act 2005*.

Alternative ways of achieving policy objectives

There are no alternative ways of achieving the policy objectives.

Benefits and costs of implementation

In recent years, there has been a growing concern that individuals believe that tanning in solaria is a safer way to tan than by using natural sunlight exposure. However, as is the case for all UVR, the UVR emitted by solaria is hazardous to human health as it is a known carcinogen delivered at relatively high intensity. Tanning is in fact a sign of damage to the skin from exposure to UVR, and sunburn is extreme damage to the skin resulting from an over exposure to UVR.

Research undertaken into the health risks associated with the use of solaria has shown that the use of the device is associated with an increased risk of melanoma, particularly among young people where the association is even stronger with increased frequency of use and earlier age of first use (Cust et al., *Sunbed use during adolescence and early adulthood is associated with increased risk of early-onset melanoma*, 2011).

Queensland has the highest rate of melanoma (the most dangerous type of skin cancer) in Australia, and Australia and New Zealand have the highest rate in the world. Skin cancer represents one of the most significant cost burdens on the public health sector system and adversely affects the health of the community.

Key research findings in 2012, involving a comprehensive meta-analysis of 27 studies undertaken of the health effects of solaria identified:

- Sunbed use is associated with a significant increase in risk of melanoma. This risk increases with the number of sunbed sessions and with initial usage at a young age (<35 years). The cancerous damage associated with sunbed use is substantial and could be avoided by strict regulations.
- Indoor tanning has a plethora of negative health effects, many of which are involved in cancerous processes. The impact of this trend on the incidence of skin cancer is of concern, mainly because of cutaneous malignant melanoma, a cancer of poor prognosis when diagnosed at an advanced stage.
- The risk of cutaneous melanoma is increased by 20 per cent for those who were ever users of indoor tanning devices with artificial ultraviolet light. The risk of melanoma was doubled when uses started before the age of 35 years (Boniol et al., *Cutaneous melanoma attributable to sunbed use: systematic review and meta-analysis*, 2012).

Of significant concern is the conclusion that future research is likely to show an increase in the adverse health effects from solaria:

- Earlier studies tended to underestimate the risks associated with indoor tanning because this behavioural trend is relatively new and thus recent uses may not (yet) have influenced the incidence of melanoma. From this logic, it is possible that future epidemiological studies on sunbed use and skin cancer could show relative risks higher than those found to date.
- The burden of cancer attributable to sunbed use could further increase in the next 20 years because the recent, high usage levels observed in many countries have not yet achieved their

full carcinogenic effect and because usage levels of teenagers and young adults remain high in many countries. This prediction is supported by the observation over 10 - 15 years of increases in the incidence of melanoma on the trunks of women from countries with widespread access to indoor tanning.

The evidence indicates that the use of solaria is harmful to human health and that the morbidity and mortality associated with the continued use of solaria will increase over time. While the current regulation provides for commercial solaria industry to end at some point in the future, it is considered that this should be expedited given the risks associated with the use of commercial solaria.

The Amendment Regulation will have varying impact on the commercial solaria industry. The impact will be minimal for an enterprise that has one unit, which is reaching the end of its useful life and the unit is surrendered to the chief executive as part of the proposed incentive package. Whereas, the impact will be more significant for those businesses that hold a number of units that form the core of their business activities. The ability of licensees to either relocate a relevant solarium outside of Queensland, or surrender a unit as part of the incentive package, will help mitigate the effects of the proposed legislative changes for a number of the affected licensees.

The introduction of a total ban for commercial solaria in Queensland will negatively impact on those individuals who use these services, which will vary depending on whether a person uses these devices on a routine or ad hoc basis. It is considered that the negative impact on an individual not being able to access commercial solaria is outweighed by the likely health benefits given that exposure to UVR emitted by solaria is a known carcinogen.

The Amendment Regulation will have a neutral impact on government as far as it relates to the administration of the legislation. The Queensland Government will have to bear the short-term costs associated with the incentive package. However, it is considered that these costs are outweighed by the benefits associated with fulfilling public expectations that the Government safeguard public health by introducing more stringent controls on the use of commercial solaria.

It is considered that the benefits associated with the proposed ban outweigh the potential impact on those who currently use commercial solaria and the small number of businesses whose core business activities centre on commercial solaria.

Consistency with fundamental legislative principles

The amendments may be considered to contravene fundamental legislative principles as far as the proposal seeks to prevent a person from possessing or utilising a commercial solarium. That is, the proposal does not have sufficient regard to the rights and liberties of individuals, as required by section 4(2)(a) of the *Legislative Standards Act 1992*.

The restrictions proposed are an appropriate way to protect the public from the harmful effects of non-ionising ultraviolet radiation used in solaria and minimize the long-term public health sector costs associated with melanoma cases.

Any breach of fundamental legislative principles is considered to be justified as the benefits to the broader community outweigh the impact on individuals who own or use commercial solaria. The introduction of a total ban on commercial solaria will ultimately benefit the community in reducing the cost of cancer care as well as psychosocial (emotional and social) effects experienced by individuals, families and friends in the care of a person who may be receiving treatment for, or ultimately die as a result of, melanoma.

Consultation

The introduction of a total ban in Queensland preventing public access to commercial solarium by 31 December 2014 was publicly announced in October 2013.

Cancer Council Queensland has long advocated for the banning of solarium and is highly supportive of the government's decision to ban solarium in Queensland, as well as the bans being implemented in the other states and territories.

Key stakeholders and affected licensees were not consulted about the Amendment Regulation. However, the Department of Health has responded to, and will continue to work with, affected licensees and consumers in response to the Minister's announcements.

Notes on provisions

Short Title

Clause 1 sets out the short title of the Regulation.

Regulation Amended

Clause 2 specifies that the regulation amends the *Radiation Safety Regulation 2010*.

Amendment of section 65 (Prescribed matters for banning of certain radiation practices – Act, s 47A)

Clause 3 amends section 65(2) to reflect the changes made to the definition of 'relevant solarium' in Schedule 9 – Dictionary. The clause removes the reference, 'use of a solarium by a health practitioner who carries out a diagnostic or therapeutic procedure'.

The reference to solarium used exclusively by a health practitioner to carry out a diagnostic or therapeutic procedure in the definition of 'relevant solarium' is considered unnecessary as the radiation devices used by health practitioners for such procedures do not meet the definition of 'relevant solarium'. That is, they are:

- (a) not designed to produce tanning of human skin; and
- (b) far less intense than commercial solarium – that is, they do not emit an erythemally effective dose of 100 joules per square metre per hour.

Devices that emit non-ionizing radiation when used for a therapeutic purpose must be registered by the Therapeutic Goods Administration. Such devices are used to treat a variety of skin conditions such as psoriasis, eczema, vitiligo (where pigment cells are damaged resulting in white patches), skin-based lymphoma and some cases of generalised itchy skin (especially due to kidney or liver disease). A health practitioner would not use such a device for tanning of the skin.

Insertion of new section 80A

Clause 4 inserts a new section 80A in part 12 (Exemptions), division 2. The clause sets out limited exemptions from the Act (section 210) to allow the chief executive to lawfully acquire or take possession of a relevant solarium that may come into the possession of the Department of Health as a consequence of the ban. As explained above, affected licensees will be able to surrender their relevant solarium to the Department of Health under an incentive package, which is being offered by the government to help facilitate the phasing out of commercial solarium.

Clause 4 also provides for this section to expire on 30 June 2015, six months after the ban is to take effect.

Insertion of new part 15A

Clause 5 inserts a new part 15A (Expiry) comprised of new section 94A, which specifies that this part and the following provisions will expire on 30 December 2014:

- section 13(1)(j), which imposes a standard condition on the holder of a possession licence for a relevant solarium
- section 28, which sets out particular radiation safety and protection measures that must be address in the radiation safety and protection plan of a possession licensee for a relevant solarium
- section 33, which also sets out particular radiation safety and protection measures that must be address in the radiation safety and protection plan of a possession licensee for a relevant solarium
- section 65, which imposes restrictions on the use of a relevant solarium by a minor or a person with fair skin.

Once the ban on commercial solarium takes full effect, the above provisions will become redundant.

Insertion of new pt 16, division 1, hdg

Clause 6 inserts a new division heading in Part 16 (Repeal and transitional provisions) as a consequence of the insertion of new division 2, which sets out the transitional provisions for this Regulation.

Replacement of s 97 (Transitional provisions for Radiation Safety Amendment Regulation (No.1) 2013)

Clause 7 inserts a new division 2 in Part 16 (Repeal and transitional provisions) to set out the transitional provisions for this Regulation comprised of new sections 97, 98 and 99.

New section 97 defines the meaning of the term ‘commencement’ for the purposes of new division 2. That is, the transitional provisions will come into effect on the same day that section 97 commences.

New section 98 replaces existing section 97, which sets out the transitional arrangements for the *Radiation Safety Amendment Regulation (No. 1) 2012*. Under the *Radiation Safety Amendment Regulation (No. 1) 2012*, section 64A was included in the Regulation to specify that a relevant solarium is prescribed as a banned radiation source in relation to the possession of the relevant solarium for the purposes of section 47 of the Act.

Subsection 98(1), which reflects the wording of existing 97, specifies that the new section 98 applies if a possession licensee is allowed to possess a relevant solarium under their licence and the solarium remains in their possession at the time the transitional arrangements come into effect. However, new subsection 98(2) specifies that the ban on relevant solarium will apply to the holder of a possession licence from 31 December 2014 or when their licence ends, whichever occurs first. Subsection (2) provides for the phasing out of commercial solarium by 31 December 2014.

Until that time, existing solarium businesses will continue to be subject to the requirements of the Act and Regulation regarding the possession, use, relocation and disposal of commercial solaria.

New section 99 provides that a relevant solarium, immediately before the commencement of section 97, continues to be a relevant solarium after the commencement of section 97, even if it is no longer used for a business purpose. This clause prevents a relevant solarium currently held by a possession licensee from being supplied to a private citizen for their personal use (e.g. sale to a customer of a beauty salon) or retained by the holder of the licence for their own personal use. Once this provision comes into effect, such solaria will be considered to be a banned radiation source under section 64A.

Amendment of schedule 9 (Dictionary)

Clause 8 removes the definition of ‘privately owned’ in Schedule 9, as a consequence of the rewording of the definition ‘relevant solarium’.

Currently, relevant solarium is defined to mean a solarium other than (a) a solarium used exclusively by a health practitioner to carry out a diagnostic or therapeutic procedure; or (b) a privately owned solarium. Privately owned solarium is defined to mean a solarium owned by an individual and is not used for a business.

As explained above, in relation to clause 3, the reference in paragraph (a) to a solarium used exclusively by a health practitioner is considered unnecessary as the radiation devices used by health practitioners for such procedures do not meet the definition of ‘relevant solarium’. That is, they are:

- (a) not designed to produce tanning of human skin; and
- (b) far less intense than commercial solaria – that is, they do not emit an erythemally effective dose of 100 joules per square metre per hour.

Consequently, *clause 8* provides for paragraph (a) to be omitted and the definition of the term ‘relevant solarium’ to be reworded to state that a relevant solarium means a solarium other than a solarium owned by an individual and not used for a business.

ENDNOTES

- 1 Laid before the Legislative Assembly on . . .
- 2 The administering agency is Queensland Health.

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