

Information Sheet

Information about Use Licences

One significant objective of the Radiation Safety Act 1999 is to protect persons and the environment from the harmful effects of ionising and harmful non-ionising radiation from particular sources. To achieve this, the Act stipulates a number of requirements. This information sheet explains the requirements for persons who are seeking to use a radiation source in Queensland.

When is a use licence required?

A use licence is required when specialist skill, knowledge and training are necessary to ensure the radiation produced by a radiation source is used safely. As it is based on a person's qualifications, skills, training, experience and competency relevant to the use of the source, a use licence may only be granted to an individual. Use licences are granted by the Director-General of the Department of Health (*chief executive*).

There are some exemptions to the requirement for a person to hold a use licence in certain circumstances prescribed in the Radiation Safety Act 1999. There are no exemptions, however, if a person is seeking to use a radiation source for the irradiation of another person for a diagnostic or therapeutic procedure. These persons must hold an appropriate use licence.

When is a use licence not required?

Certain radiation sources, when constructed and operated in accordance with the manufacturer's instructions pose a very small risk to persons and the environment. It has been shown that some such radiation sources have had their risks engineered away. For these radiation sources the requirement for a licence has been shown to have negligible impact on radiation safety and thus the sources have been listed as exempt from them being required to be used by a licensee.

Division 2 of the Radiation Safety Regulation 2010 details the radiation sources for which their use is not required to be by a licensee. These sources are known as 'exempt radiation sources' and are listed in the attachment to this Information Sheet.

Additionally, there are some exemptions to the requirement for a person to hold a use licence in circumstances where a person is using a source in the presence of and under the supervision of a person licensed to use the source and the use is for helping the licensee to carry out a practice, or the person is undergoing prescribed training. Sections 66 and 67 of the Radiation Safety Regulation 2010 details the prescribed radiation practices and training. These prescribed radiation practices and the prescribed training are listed on the attachment to this Information Sheet.

What are the obligations of use licensees?

The Act sets out and delineates between the obligations of use licensees and those of possession licensees. The primary responsibilities of a licensee are listed below.

(a) Radiation dose limits

Under the Act, a person who is carrying out a radiation practice must not cause another person to receive a radiation dose higher than the radiation dose limits prescribed in the Radiation Safety Regulation 2010.

This requirement does not apply if the other person receives the dose while being a treated person, or the person receives the dose while involved in carrying out a diagnostic or therapeutic procedure involving the irradiation of a person (i.e. a comforter of a patient).

(b) Ensuring health and safety of persons and the environment

The Act requires each possession licensee to have an approved radiation safety and protection plan for the radiation practice. It is a requirement under the Act that persons carrying out the practice ensure that they have access to the possession licensee's radiation safety and protection plan, and have undergo the training program specified in the plan.

Under the Act, a person carrying out the practice must take reasonable steps to ensure that neither a person, nor the environment is adversely affected by exposure to radiation. One reasonable step is to ensure that the person is complying with the possession licensee's approved radiation safety and protection plan.

(c) Compliance with conditions of licences

Certain use licensees who are authorised to use radiation sources to carry out radiation practices are required to abide by conditions stated in their licences and in section 13 of the Radiation Safety Regulation 2010.

(d) Diagnostic and therapeutic procedures involving the irradiation of a person

Use licensees who are authorised to carry out diagnostic or therapeutic procedures involving the irradiation of a person should note that only certain persons (authorised persons) may prescribe a therapeutic procedure for another person, or request a diagnostic procedure for another person. Part 10 of the Radiation Safety Regulation 2010 provides a list of authorised persons.

Term of Licence

A use licensee may have a term of one, two or three years. Under the Radiation Safety Act 1999, applications for renewal of licences are required to be made prior to the expiry of the current licence.

Enquiries

For further information, please contact the Radiation Health, Health Protection Unit of the Department of Health. The details for Radiation Health are:

Office

Radiation Health
Health Protection Unit
15 Butterfield Street
HERSTON QLD 4006

Postal

Radiation Health
Health Protection Unit
PO Box 2368
FORTITUDE VALLEY BC QLD 4006

Phone

07 3328 9987

Website

www.health.qld.gov.au/radiationhealth

Facsimile

07 3328 9622

Email

radiation_health@health.qld.gov.au

Exempt Radiation Sources

The following radiation sources have been listed as exempt from their being required to be used by a use licensee.

- (a) a sealed source apparatus, incorporating a sealed radioactive substance, used for chemical analysis or industrial gauging
- (b) a radiation apparatus used for industrial gauging
- (c) a cabinet radiation apparatus used for its intended use
- (d) an enclosed radiation apparatus used for its intended use
- (e) an ionising radiation source designed only for irradiating things, but not including use of the source by a person who is carrying out commissioning, maintenance or repair of the source

Note: This does not apply to an ionising radiation source designed for irradiating individuals.
- (f) a sealed radioactive substance, having an activity of not more than 370MBq, used for—
 - (i) calibration checks of measuring instruments; or
 - (ii) quality control procedures undertaken for—
 - (A) another radiation source or a sealed source apparatus; or
 - (B) if another radiation source is used to carry out a radiation practice involving the production of images—any ancillary imaging equipment used in connection with the use of the other source to carry out the practice
- (g) a sealed radioactive substance, having an activity of not more than 4MBq, used for transferring anatomical landmarks to images produced using a gamma camera
- (h) a radioactive substance, having an activity of not more than 500kBq, used for an in vitro test
- (i) a sealed radioactive substance used for static elimination
- (j) a fully enclosed analytical radiation apparatus used for its intended use
- (k) a laser apparatus designed only for puncturing a person's skin to obtain capillary blood samples but not including use of the apparatus by a person who is carrying out maintenance or repair of the apparatus
- (l) a radioactive substance incorporated in an ionisation chamber smoke detector, but not including while the detector is being manufactured or repaired
- (m) a radioactive substance containing the radionuclide promethium-147, hydrogen-3, or radium-226 incorporated in an item to produce light, but not including while the item is being manufactured or repaired
- (n) a radioactive substance containing the radionuclide hydrogen-3 with an activity of less than 74GBq, incorporated in a gaseous tritium light device, if the device is being used as a safety, or warning, sign, and complies with sections 2, 4 and 5 of the NHMRC 'Appendix XXXIX—Recommendations for exemptions from licensing of gaseous tritium light devices'.
- (o) the following sealed radioactive substances with no more than the stated activity if used for teaching the characteristics and properties of radiation or radiation sources.

cobalt-60 - 200 kBq	strontium-90 80
caesium-137 200	radium-226 20
americium-241 20	
- (p) the radionuclide krypton-85, incorporated in a cold cathode gas discharge tube, but not including while the tube is being manufactured or repaired.

Prescribed Radiation Practices

A person who is assisting a use licensee is not required to be licensed if the radiation source is used in the presence, and under the personal supervision, of a use licensee; and they are helping the licensee to undertake one of the following radiation practices:

- industrial radiography involving the use of an ionising radiation source
- borehole logging involving the use of a sealed source apparatus
- density-gauging, or moisture-gauging, for geo-technical purposes, involving the use of a sealed source apparatus
- the preparation of a radioactive substance or radiation apparatus, or assembly of a sealed source apparatus, for use in carrying out a diagnostic or therapeutic procedure involving the irradiation of a person
- the commissioning, maintenance or repair of radiation sources or sealed source apparatus
- the compliance testing of a radiation source by a qualified accredited person for a radiation source of that type, involving the use of the source or another radiation source
- the compliance testing of premises by a qualified accredited person for premises of that type, involving the use of a radiation source
- the undertaking of quality control procedures, in relation to a radiation source or a sealed source apparatus, involving the use of a radiation source.

Prescribed Training

A person who is assisting a use licensee is not required to be licensed if the radiation source is used in the presence, and under the personal supervision, of a use licensee; and they are:

- (a) training at an educational institution (i.e. a school, university, training institution or professional college that educated persons about radiation sources, or uses radiation sources in the course of its education of persons); or
- (b) undertaking a course or subject stated in schedule 7 of the Radiation Safety Regulation 2010.

Note: *This exemption does not apply if the training involves the actual irradiation by the trainee of a person as part of a diagnostic or therapeutic procedure*