Licensing of Users of Radioactive Substances used for Portable Moisture/Density Gauges

The Radiation Safety Act 1999 requires all persons who use radiation sources to hold a use licence. Use licences are granted by the Director-General of the Department of Health (chief executive). Only an individual may apply for a use licence.

Use licences may be issued only to persons who have appropriate skills and knowledge of radiation safety and protection, as well as expertise in the use of the radiation source. This information sheet outlines the licensing requirements for persons who wish to use radioactive substances in portable moisture and density gauges for geotechnical measurements.

When is a licence not required?

A licence to use radioactive substances in portable moisture and density gauges is not required if a person:

(i) is assisting another person who is licensed to use portable moisture and density gauges; and
(ii) is using the gauge in the presence and under the personal supervision of the licensed person.

Knowledge and practical competencies

Applicants for a licence to use radioactive substances in portable moisture and density gauges must demonstrate that they have the following knowledge and practical competencies.

Basic knowledge of radiation safety and protection

- basic knowledge of the properties and effects of ionising radiation
- the principles of radiation protection
- the principles of personal radiation monitoring
- requirements relevant to the use of radioactive substances in portable moisture and density gauges

Practical competencies relevant to safe use of portable moisture and density gauges

- assessing/reassessing risks and hazards during use and transport
- correct and safe methods to operate the gauge
- using and caring for radiation monitoring equipment
- routine maintenance of gauges (e.g. cleaning the shutter)
- measurements and monitoring of radiation and interpretation of the measurements
- operational/functional checks on gauges and associated devices
- storage and transport of radioactive substances
- source leak testing
- incident response
Eligibility for a licence

If a person wishes to use radioactive substances in a portable moisture and density gauge, he or she must complete and submit a Form 2: Application for a Licence to Use Radiation Sources. Applicants will be considered eligible for a licence if, in addition to completing the application form and providing the appropriate application and licence fees, they:

1. submit verification that they have satisfactorily completed a course in radiation safety which has been approved for this purpose by Radiation Health; and

2. submit a Certificate of Competency from a person approved by the Director, Radiation Health and who is licensed, under the Radiation Safety Act 1999, or similar Act, to use portable moisture and density gauges. This certificate must have been provided within 2 years of the licence application being submitted; and

3. provide evidence of their experience in the use of portable moisture and density gauges by submitting either:
   (a) a copy of their log book which demonstrates that they have satisfactorily performed at least 20 hours of measurements (i.e. actually using a gauge) under the supervision of a person licensed to use portable moisture and density gauges. Each log book entry must have been countersigned by the licensed person who supervised the trainee; or
   (b) a copy of an equivalent, and current, licence issued by another Australian jurisdiction.

Approved radiation safety courses

A list of approved radiation safety courses is available on our website or on request from Radiation Health. Persons who have completed a course which has not been approved should submit full details of the course for consideration by Radiation Health.

Term of Use Licence

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

Licensees are required to have and comply with a Radiation Protection Programme for the Transport of Radioactive Materials. The department has prepared such a programme which a large number of licensees are using. A copy of this programme may be found at:

Enquiries

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

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