Rainwater tanks—regulatory roles and responsibilities

Information and guidance on the governance of rainwater tanks and the use of roof harvested rainwater in Queensland

Regulatory roles and responsibilities

Queensland Health
Queensland Health is responsible for the implementation of the Public Health Act 2005. It also administers and enforces Section 59 of the Act which prohibits the use of lead, or any material containing lead, in a water collection system used as a supply of potable water.

Queensland Health is also responsible for ensuring that government policy on the safe operation of rainwater tanks is clearly communicated to local governments and the general public through legislation, fact sheets and education programs.

Local governments
Local governments are responsible for the administration and enforcement of Part 1A, Division 2 of the Public Health Regulation 2005 which, amongst other things, details the requirements of rainwater tanks to prevent mosquito breeding. They are also responsible for determining if the owner or occupier of premises is maintaining the rainwater collection and distribution system in accordance with other relevant legislation including, but not limited to, public health, amenity, building, and plumbing and drainage requirements.

Local governments may undertake investigations, inspections and/or audits to monitor and determine compliance with relevant legislation or in response to complaints. They may also use a range of activities such as risk-based surveillance, education and communication programs to increase awareness and manage public health risks.

Rainwater tank industry
Manufacturers, wholesalers and installers of rainwater tanks must ensure they comply with the requirements of the Public Health Regulation 2005. The legislation stipulates a ‘relevant tank’—a tank or other receptacle that is used or intended to be used for holding or storing water or another liquid—must have at every opening:

(a) mosquito-proof screens that:
   (i) are made of brass, copper, aluminium or stainless steel gauze, and
   (ii) have a mesh size of not more than 1mm, and
   (iii) are installed in a way that does not cause or accelerate corrosion, and
   (iv) stop mosquitoes passing through the openings, or
(b) flap valves that, when closed, stop mosquitoes passing through the openings.

Furthermore, a person must ensure any rainwater collection and storage system used as a potable supply is not constructed of lead, or materials containing lead, under the Public Health Act 2005.

The rainwater tank industry should refer to the enHealth document Guidance on the Use of Rainwater Tanks and relevant legislation, development codes, guidelines and Australian standards to ensure rainwater collection and distribution systems and their component materials meet their specified uses. These requirements are summarised below.

Home/business owners and occupiers
The occupier of a place where a rainwater tank is installed (or if there is no occupier, the owner of the premises) must ensure that the tank is maintained to ensure every opening includes:

Disclaimer: Please note that any material printed is regarded as an uncontrolled copy. It is the responsibility of the person printing the document to refer frequently to the latest electronic copies for updates.
(a) mosquito-proof screens that:
   (i) are made of brass, copper, aluminium or stainless steel gauze, and
   (ii) have a mesh size of not more than 1mm, and
   (iii) are installed in a way that does not cause or accelerate corrosion, and
   (iv) stop mosquitoes passing through the openings, or
(b) flap valves that, when closed, stop mosquitoes passing through the openings.

Under the Public Health Act 2005 a person must not use, or allow the use of, lead (or any material containing lead) in a rainwater collection and storage system when used as a supply of potable water. Furthermore, the owner of a building must not knowingly allow any part of a rainwater collection and storage system to remain if it contains lead.

If the owner is occupying the premises, it is their responsibility to ensure that the water collected in the rainwater tank is of a quality that is appropriate for its intended use. For example, it is their responsibility to ensure the collected rain water is of a potable quality if required.

If a property is rented out, the property owner must comply with health and safety regulations, such as local council regulations, at the start of the tenancy. This includes health laws pertaining to rainwater tanks. Certain management tasks influencing the quality of the water collected in a rainwater tank may be the tenant's responsibility.

If you are renting a property with one or more rainwater tanks and are unsure of the extent of your responsibilities contact the Rental Tenancy Authority on 1300 366 311 or www.rta.qld.gov.au/enquiry.cfm.

Accommodation premises
Under the Public Health Act 2005, water supplied to guests of accommodation premises must not constitute a public health risk. Local governments may also enact specific local laws relating to the use of roof harvested rainwater in accommodation premises. Further requirements are likely to apply under workplace health and safety legislation (see http://www.deir.qld.gov.au/workplace/ for further information.

Food businesses
Under the Food Act 2006, food businesses must ensure water used in their business (which may include roof harvested rainwater) complies with the requirements of the Australia New Zealand Food Standards Code, Standard 3.2.3. The water must be of a potable quality unless the food business can demonstrate that the non-potable water will not adversely affect the safety of the food handled by the business.

Building Codes Queensland
Building Codes Queensland (BCQ) administers the Queensland Development Code which mandates the installation of rainwater tanks for new dwellings in certain areas of Queensland. BCQ also administers the Plumbing and Drainage Act 2002 which applies to the plumbing associated with rainwater tanks. Visit www.dlgp.qld.gov.au/our-services/building-codes-queensland-2.html for further information.

Office of Fair Trading and Australian Competition and Consumer Commission
Manufacturers, wholesalers, retailers and installers of rainwater tanks should note that consumer protection provisions of the Trade Practices Act 1974 (Commonwealth) and Fair Trading Act 1989 (Queensland) cover any commercial conduct that could be misleading, deceptive or untruthful. This includes the advertising and sale of rainwater collection and distribution systems.

Contact the Australian Competition and Consumer Commission on 1300 302 502 or www.accc.gov.au or the Office of Fair Trading on 13 13 04 or www.fairtrading.qld.gov.au/Water-tanks.htm for further information.

Relevant legislation, standards, codes and guidelines

Queensland legislation
The following are available at www.legislation.qld.gov.au

- Public Health Act 2005
  - Chapter 2, Part 1, Section 11—provides definition of public health risk and details requirements for preventing, controlling and reducing risks to public health
  - Chapter 2, Part 6, Section 59—requires that no part of a potable water collection system, nor a tank or other receptacle for potable water, can contain lead.

- Public Health Regulation 2005 Part 1A, Division 2, Mosquitos—details requirements for rainwater tanks and the prevention of mosquito breeding.
- Standard Plumbing and Drainage Regulation 2003—prohibits the connection of a local government water service pipe to a water storage tank without approval from the local government. If approval is obtained, backflow devices must be fitted.
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- **Sustainable Planning Act 2009**—helps achieve ecological sustainability by managing the impacts of developing, coordinating and integrating planning at the local, regional and state levels.
- **Food Act 2006**—defines a food business and adopts the Australia New Zealand Food Standards Code, including the quality of water that must be used in food businesses.

**Australian standards**
The following are available at [infostore.saiglobal.com/store/default.aspx](http://infostore.saiglobal.com/store/default.aspx) or phone 131 242.

- AS/NZS 1397:2001 Steel sheet and strip - hot-dipped zinc-coated or aluminium/zinc-coated—specifies requirements for steel sheet and strip supplied in thicknesses up to and including 5mm.
- AS/NZS 3500.1:2003 Plumbing and drainage part 1: water services—specifies the requirements for the design, installation and commissioning of cold water services from a point of connection to the points of discharge, and non-drinking water from a point of connection to the points of discharge. It applies to new installations as well as alterations, additions and repairs to existing installations. The standard also requires that drinking water be supplied to plumbing fixtures and outlets for human consumption, bathing, food preparation or washing of utensils.
- AS/NZS 3735:2001 Concrete structures retaining liquids—specifies requirements for concrete structures and members that include reinforcing steel or tendons, or both, used for retaining liquids at ambient temperature.
- AS/NZS 4020:2005 Testing of products for use in contact with drinking water—specifies requirements for the suitability of products for use in contact with drinking water, with regard to their effect on the quality of water.
- AS/NZS 2070:1999 Plastics materials for food contact use - Sets out materials and procedures to be used during the various stages of production of plastics materials, coating and printing of plastics items for food contact and subsequent use. All plastic tanks and plastic lined tanks should comply with this standard.
- Interim AS/NZS 4766:2006 Polyethylene storage tanks for water and chemicals—specifies requirements for the design and manufacture of cylindrical upright ribbed or straight walled polyethylene storage tanks for above ground, vertical installation and are capable of containing water.
- HB 230:2008 Rainwater tank design and installation handbook—provides practical information for the collection, use and storage of rainwater.

**Codes and guidelines**

- Queensland Development Code MP 4.2 – Water savings targets, Queensland Government—provides a framework which consolidates Queensland-specific standards for rainwater tanks into a single document. This mandatory part of the Code applies to all
new ‘class 1’ buildings (unless exempted) and specifies the standards for the construction and the installation of rainwater tanks (including required signage), as well as the minimum size of the rainwater tanks and allowable end uses for rainwater (external use, toilet flushing and cold water tap for laundry washing machines).

- Water saving targets for councils, plumbers, builders and developers – a guide to the Queensland Development Code MP 4.2 – provides guidance to assist councils and the building industry in understanding the technical and regulatory requirements for the installation of rainwater tanks, greywater treatment plants, dual reticulation and stormwater reuse.

- Queensland Development Code MP 4.3 – Alternative water sources – commercial buildings. Queensland Government—applies to certain types of new commercial buildings being built in the local government areas listed in appendix A of the document (predominantly South East Queensland local government areas). This mandatory part of the code specifies the standards for the construction and installation of a rainwater tank as well as suitable uses of rainwater.

- Guidance on use of rainwater tanks, enHealth 2010—a health-based guideline on the installation, maintenance and use of rainwater tanks.

- Australian Drinking Water Guidelines 2004—incorporates the Framework for the Management of Drinking Water Quality and provides guidance to industry and the general public on what constitutes good quality drinking water. This document is expected to be updated in 2011.

Associated material

- Dengue Fever Management Plan. Queensland Health—minimises the number of locally-acquired cases of dengue in Queensland by strengthening and sustaining risk-based surveillance, prevention and control measures for both human cases and the mosquitoes that carry the dengue virus.

- Rainwater Tanks: A Guide to Keeping Your Tank Safe. Queensland Health – provides guidance on how to minimise the risk of rainwater tanks becoming breeding sites for disease carrying mosquitoes.

- Domestic Rainwater Harvesting in Queensland. Building Services Authority—provides a guide to the installation of rainwater tanks and their associated roof water collection systems.

- Rainwater Tanks and Roof Harvested Rainwater. Queensland Health – provides guidance on the health risks associated with using of roof harvested rainwater.
Useful terms

**Food business** is a business, enterprise or activity that involves:
(a) the handling of food intended for sale, or
(b) the sale of food
regardless of whether the business, enterprise or activity is of a commercial, charitable or community venture and whether it involves the handling or sale of food on one occasion only.

**Rainwater collection and distribution system** includes, but is not limited to, the roof, guttering, downpipes, associated pipe-work to and from the tank, collection tank, distribution system to all areas of the house and associated pumps and fittings.

**Occuipier** of a place, includes a person who reasonably appears to be an occupier, or in charge, of the place.

**Place** includes premises and vacant land.

For more information

In most instances your local council can address enquiries related to the management of rainwater tanks. Contact details of your local council can be found at: [www.qldcouncils.com.au/web/guest/find-your-council](http://www.qldcouncils.com.au/web/guest/find-your-council).

If you need to contact Queensland Health, contact details your nearest Queensland Health public health unit (business hours, Monday to Friday only) are listed below:

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<th>Tel:</th>
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<tr>
<td>Brisbane North</td>
<td>3624 1111</td>
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<td>4150 2780</td>
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<td>4920 6989</td>
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