

Rainwater tanks affected by natural disasters

Fact sheet

Rainwater tanks and bore water-holding tanks impacted by storms, floods, bushfires and other natural disasters are likely to contain harmful organisms. This is likely to mean the water stored in the affected tanks will not be suitable for normal use.

Rainwater tank use during and after flooding

Water from rainwater tanks should not be used for drinking or personal hygiene if the tank has been, or is suspected to have been, contaminated with flood water. Rainwater should not be used if the tank or connecting pipework has been damaged, or where flood water has been in contact with taps or connections within or outside the home. Stored rainwater may continue to be used for toilet flushing and clean-up purposes.

If rainwater contamination has occurred or is suspected, the town water supply should be used for all drinking and hygiene purposes. If a town water supply is not available, an alternate water supply should be sourced (e.g. bottled water or water from communal water supply points).

What to consider when restoring tanks

It is important to first assess the structure of your tank and the surrounding environment to ensure it is safe to begin restoration works. If damaged (e.g. by fire), or relocated, tanks have the potential to pose a drowning hazard and access should be appropriately restricted.

Electrical safety

If you know or suspect that electrical equipment associated with your tank has been affected, it is recommended that it is inspected and declared fit for use by a licensed electrician before attempting to restore the tank.

Mosquitoes

- under Queensland legislation, all water storage tanks must have at every opening of the tank
 - mosquito-proof screens that
 - are made of brass, copper, aluminium or stainless-steel gauze, and
 - have a mesh size of not more than 1 mm, and
 - are installed in a way that does not cause or accelerate corrosion, and
 - stop mosquitoes passing through the openings, or
 - flap valves that, when closed, stop mosquitoes passing through the openings.

Tanks that have been damaged or are missing screens or flap valves as a result of storms and floods, may provide ideal breeding sites for mosquitoes capable of carrying diseases. Action should be taken, as soon as it is safe to do so, to ensure mosquitoes are prevented from breeding in these tanks.

Reinstating the rainwater or bore water-holding tank

If your tank has been inundated with flood waters, the water will have been contaminated and should be discarded. If you have an underground tank, you should not attempt to empty it while the surrounding ground is still saturated. Emptying water before the surrounding ground has dried out may result in damage to the tank and associated plumbing.

Once the tank has been emptied, the inside of the tank should be hosed out with clean water and sanitised. Any associated plumbing, guttering, downpipes and roof surfaces inundated by flood waters will also need to be cleaned and sanitised. A tank supplier will be able to advise on the best sanitation method depending upon the material the tank is constructed of. If cleaning of the tank requires entering the tank, it is recommended that a qualified, professional tank cleaner undertake this activity as working in a confined space is hazardous.

Cleaning agents that release hazardous fumes or adversely affect the water quality after cleaning should not be used.

After cleaning and sanitisation has taken place, the tank should be refilled with water from a source known to be safe and should be appropriately disinfected using enough chlorine to give an initial chlorine dose of 5 mg/L. The amount required will depend on what form of chlorine you use and how much water is in the tank.

Guidance on calculating the volume of your tank and on chlorine dosage can be found in the further information section below, however as a general rule

- household bleach (four per cent concentration) – 125 mL or 125 g/1000 L
- liquid swimming pool chlorine (12.5 per cent concentration) – 40 mL or 40 g/1000 L
- granular swimming pool chlorine (70 per cent concentration) – 7 g/1000 L

When using Chlorine, it is important to remember to adhere to the warnings, directions for use and safety precaution advice contained on the product label.

After adding, allow to stand for at least one hour (or overnight if possible).

Further information

- Department of Health www.health.qld.gov.au/disaster
- Preventing mosquito breeding
<https://www.qld.gov.au/health/conditions/all/prevention/mosquito-borne/control/breeding-sites>
- Calculating volume of tank and chlorine dosage can be found at
<http://www.health.gov.au/internet/main/publishing.nsf/content/ohp-enhealth-raitank-cnt.htm>
- Call 13 HEALTH (13 43 25 84) at any time
- Contact 13 QGOV (13 74 68) for your nearest Public Health Unit