



Fact Sheet No. 22

GUIDELINES FOR THE INSTALLATION OF Rainwater Tanks Supplementary Notes

Rainwater Tanks and Drinking Water

A properly constructed and maintained rainwater tank can provide safe soft clear water. However, a range of factors can jeopardise the quality and composition of rainwater and this must be taken into consideration when deciding to consume water from a rainwater tank.

In view of this variability, Manly Council does not advocate the use of water from domestic rainwater tanks for human consumption. It is acknowledged, however some residents may choose to use tank water for potable use.

Contamination of rainwater in urban areas such as Manly occurs from a variety of sources. Atmospheric pollutants such as wind blown dust, industrial fallout often carried kilometres from their point of origin may enter the tank. Rainwater should not be used for drinking when situated in or close to industrial or heavy traffic areas.

Faecal deposits from birds, rats and other animals may pollute the water supply with bacteria and viruses making the microbiological and chemical quality of stored tank water variable.



Roofs coated in material which may contaminate water such as acrylic paints, lead based paints, asbestos cement, tar based roofing, lead flashing and timbers treated with pesticides must be excluded from the roof catchment.

Where concerns exist about suitability of roofing material for use as a rainwater catchment surface, advice on the matter should be sought from the manufacturer of the roofing material.

Rainwater should not be collected from parts of roofs incorporating flues from wood burners. Overflows from hot water systems and evaporative air conditioners should not be allowed to discharge onto the roof catchment.

How much water do I use:

Toilet flush (single flush system)	12 litres
Bath	100 litres
Shower (10 minutes)	200 litres
Dishwasher load	50 litres
Washing Machine load	150 litres
Brushing teeth with tap running	5 litres
Drinking, cooking, cleaning per person per day	10 litres
Hand basin per use	5 litres
Garden sprinkler per hour	1000 litres
Garden drip per hour	4 litres
Car washing with hose	200 litres
Hosing driveways	100 litres
Total Daily Consumption per Household	900 litres

Source: Department of Local Government Circular No. 95/73 dated 20 September 1995.

Water supplied for human consumption should conform to the National Health and Medical Research Council, Agriculture & Resource Management, Council of Australia & New Zealand Australian Drinking Water Guidelines.

Tanks & their associated fittings & fixtures must comply with the following Australian Standards:

- ▶ AS 2179 - 1986 'Metal Rainwater Goods - Specification'
- ▶ AS 2180 - 1986 'Metal Rainwater Goods - Selection & Installation'
- ▶ AS 2070 - 'Plastics Materials for Food Contact Use'

The following measures will enhance the quality and purity of water from your tank:

- (a) Fit a diverter valve which allows the first 2-5 minutes of rainwater to drain into the stormwater system instead of into the tank. This allows dirt and pollution in the air and on the roof to be washed away.
- (b) Installation of a suitable water filter.

Disclaimer

The information contained here is a guide only. It is recommended that the advice of the Customer Service or Land Use Management staff be sought in conjunction with any enquiries and Development Applications concerning the use of land within the Manly Council area.

Disinfection of tank water may be achieved through the following methods:

- ▶ boiling
- ▶ chlorination
- ▶ UV light
- ▶ other chemicals.

If the water passing through a copper pipe turns blue or green the cause is copper dissolved from copper or copper alloy fittings on the tank. This is called "cupro solvency" and may occur when water is acidic in nature and comes into contact with copper metal. Water in this condition must not be used for drinking until its acidity is established.

Note: Prior to installing a tank to be used for drinking purposes you are advised to contact the NSW Department of Health and Sydney Water who will assist in providing additional or updated information on water quality matters.

For further advice on health matters relating to rainwater tanks please contact Council's Environmental Health Officer on 9976-1511 **or**

Environmental Health unit
NSW Health Department
PO Box 798
GLADESVILLE NSW 2111
Ph: 9816 0373

Bibliography

- ▶ South Australian Health Commission, *Guidance on the collection, care and control of Rainwater Tanks*



Photo Source: Sweetwater Industries P/L brochure