





Drinking water treatment procedures for vehicle mounted water containers

The following information is derived from the Code of Practice for the Bulk Cartage of Drinking Water as published by the Department of Health. These procedures are designed to be used by owners and users of recreational or commercial vehicles and boats equipped with drinking water containers with a capacity greater than 100 litres.

Selection of Containers, Fittings & Hoses

All materials that may come into contact with drinking water within containers, fittings and hoses must either comply with:

- Australian Standard AS 4020 2005 'Testing of Products for Use in Contact with Drinking Water',
- Australian Technical Specification ATS 5200.026 – 2004 'Technical Specification for plumbing and drainage products, Cold Water Storage Products'; or
- Australian Standard AS 2070 'Plastic materials for food contact use'.

Look for either the WaterMark,   AS 4020, TS5200.026 or "Drinking Water Only", marking.

Brass snap on hose fittings reduce the potential for contamination and are preferable to screw on fittings. However, screw on fittings may be used providing the threads are thoroughly inspected and cleaned before attachment.

Do not use containers, fittings and hoses used for the transfer, transport and storage of drinking water for any other purpose.

Equipment Markings

- All drinking water containers should be marked "Drinking Water" in lettering 100 millimetres high.
- Hoses used for drinking water should be labelled "Drinking Water".

Safe Sources of Drinking water

Licensed drinking water providers operate most town water (reticulated) supplies in Western Australia. If you are unsure of the water treatment undertaken in a town or community, either contact the Local Government Environmental Health Officer or the Department of Health. Any other source of water should be treated with suspicion.

Disinfection of Drinking Water

Calcium hypochlorite is recommended for use as a disinfectant in drinking water in vehicle mounted water containers as it may be stored for long periods of time and it is heat stable.

Do not use stabilised chlorine or chlorine containing cyanuric acid.

Disinfection Procedures

Initial Use of Containers

If containers are going to be used for the first time to store drinking water:

- Only use containers that are designed for drinking water storage (See Selection of Containers)
- Drain containers dry.
- Where possible scrub the inside using a clean soft bristle broom or cleaning rag and a solution of chlorinated water or water and dishwashing liquid. (Clean the exterior of the container with particular attention to the area around filling and discharge openings).
- Rinse clean with drinking water (town water supply) to remove any residue of the cleaning agent.
- Fill with drinking water from a town water supply, chlorinated with 7 grams of calcium hypochlorite per 1,000 litres of water and leave to stand for 24 hours to allow the chlorine taste and smell to dissipate.
- Seal securely against dust and sunlight with a tight fitting lid.

Initial Use of Fittings and Hoses

Before fittings and hoses are attached to containers to supply drinking water:

- Soak in a solution of chlorinated water or water and mild detergent (e.g. dishwashing liquid).
- Rinse clean with drinking water (town water supply) to remove any residue of the cleaning agent.
- Seal securely against dust and dirt.

Continual Use

- Treat Drinking water that is continually used with 1 gram of calcium hypochlorite per 1,000 litres of water each week.
- Wait for 2 hours to allow the chlorine taste and smell to dissipate.

Topping up Containers

- Only use hoses marked "Drinking Water" to fill containers. Clean and rinse the external surfaces of hoses that are to be placed inside water containers.
- Treat Drinking water that is occasionally topped up from a town water supply with 1 gram of calcium hypochlorite per 1,000 litres of water every time town water is added to the container.

When Shifting Camp

When shifting camp:

- Empty all hose connections to containers, stand pipes and supply points.
- Join end to end or cap hoses, standpipes or supply points so as to eliminate any chance of contamination by dirt, dust or foreign object.
- Cap and seal outlets on containers.

- Empty any other fitting that is used in the water system and store away from dirt, dust and other contaminants.

**Treat water from any source other than a town supply with suspicion.
If used always add 7 grams of calcium hypochlorite per 1,000 litres of water and left for 24 hours before use.**

Emergency Drinking Water Treatment

For advice on how to treat drinking water in an emergency (24 hours a day) send an email to the healthinfo@health.wa.gov.au automatic email reply service. Type **emergency** in the subject line and send.

Chemical Handling

Before handling any chemicals put on chemical resistant gloves, splash proof goggles or a face shield.

Chemical Safety

Calcium Hypochlorite is a strong alkaline and can burn skin or damage eyes use only in a well-ventilated area and avoid inhaling fumes or ingesting granules.

If Calcium Hypochlorite comes in contact with either diesel or acid the resultant chemical action could cause a fire.

Chemical Storage

Store Calcium hypochlorite in a secure, clearly marked, damp proof travel container.

Consumer/Operator Advice

Place this advice within the vehicle, vessel or caravan in a sealed waterproof container

Attach the disinfection tag (see below) to the water storage container.

Log Books

Record details of the date, source, volume and treatment of drinking water in a log book securely stored within the vehicle.

Storage When Not in Use

Seal and store containers, fittings and hoses in such a manner as to prevent contamination when not in use.

More Information:

Water Unit
Environmental Health Directorate
Department of Health
PO Box 8172
PERTH BUSINESS CENTRE WA 6849

Telephone: 08 9388 4999
Facsimile: 08 9388 4910



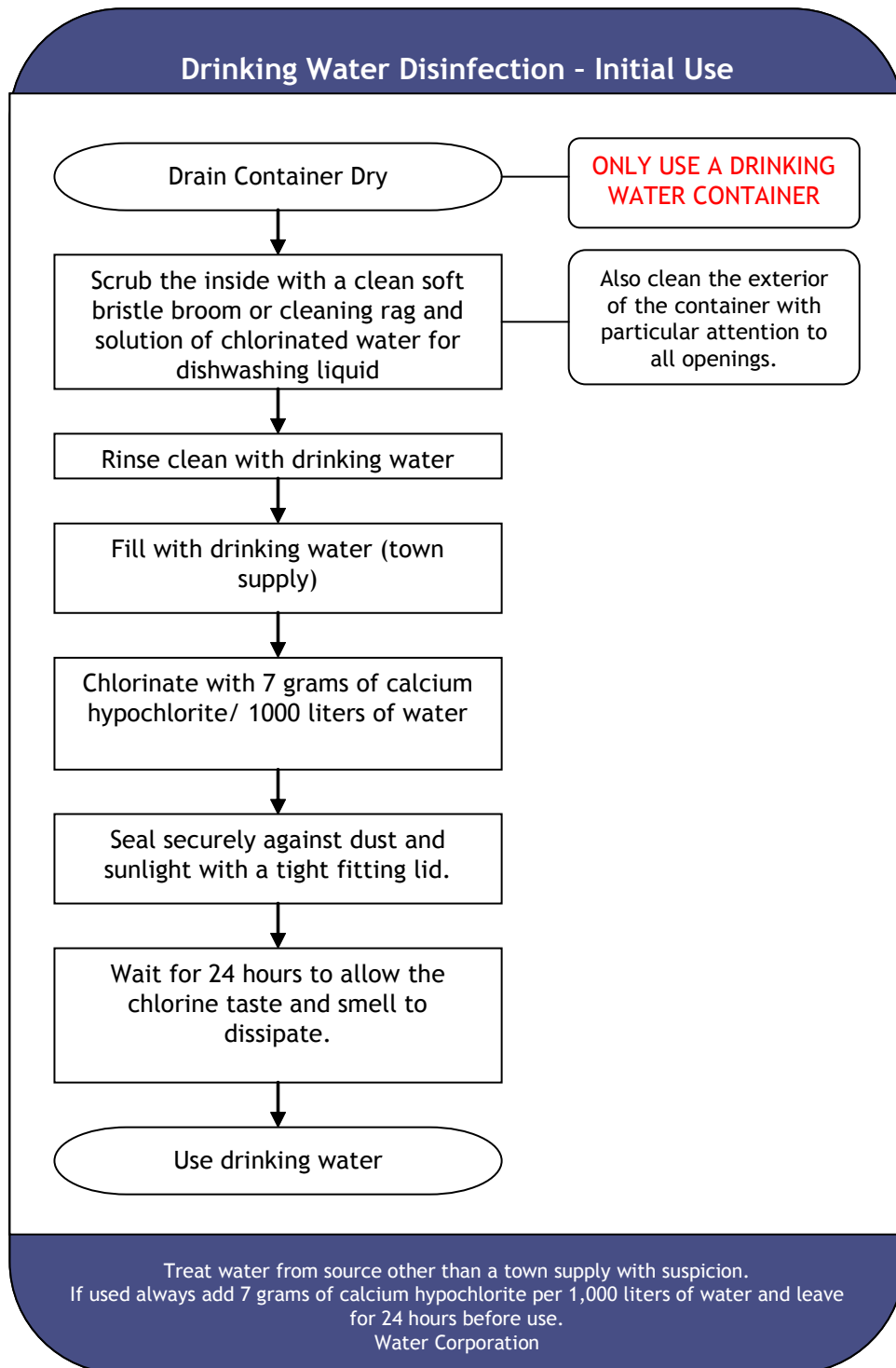
**This document can be made available in alternative formats
on request for a person with a disability.**

© Department of Health 2015

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the *Copyright Act 1968*, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.

Disinfection Tag

Cut this double sided tag out, seal with plastic waterproofing and attach to the water container



Drinking Water Disinfection - Continual Use

Clean the exterior of the container with particular attention to all openings with a clean soft bristle broom or cleaning rag and solution of chlorinated water or dishwashing liquid.



Top up with drinking water (town supply)



Chlorinate with 1 gram of calcium hypochlorite/ 1000 liters of water



Seal securely against dust and sunlight with a tight fitting lid.



Wait for 2 hours to allow the chlorine taste and smell to dissipate.



Use drinking water

What to do when transporting water.

- Empty all hoses, standpipes etc
- Join hoses end to end or cap them
- Cap or cover water container inlets and outlets
- Empty any other fittings used in the water system and store away from dirt, dust and other contaminants.

Treat water from any source other than a town supply with suspicion.
If used always add 7 grams of calcium hypochlorite per 1,000 liters of water and leave for 24 hours before use.