



Port Stewart Water Supply Manual

Contributing author information

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Tania Cobham is a Project Manager with Arup, based in the Cairns office. She has a Bachelor in Environmental Engineering and a Diploma of Project Management. Her particular field of expertise is the application of water, wastewater and environmental knowledge and technologies into a community context. Soon after graduating Tania lived and worked in the mountains of Northern Pakistan assisting a community with eco-tourism initiatives. In Queensland, Tania has worked with Indigenous communities to design a viable housing project and to assess and upgrade infrastructure for new and established townships. She is a member of the Queensland Community Development Network and has been involved in a range of conferences and projects aimed at building local capacity.

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For additional information please contact

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Acknowledgements

The Desert Knowledge Cooperative Research Centre (DK-CRC) is an unincorporated joint venture with 24 partners whose mission is to develop and disseminate an understanding of sustainable living in remote desert environments, deliver enduring regional economies and livelihoods based on Desert Knowledge, and create the networks to market this knowledge in other desert lands.

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FaCSIA:

The Department of Families, Community Services and Indigenous Affairs (FaCSIA) is the Government's principal source of advice on social policy issues. We also have responsibility to effectively and efficiently manage a diverse range of programs and services to improve the lives of Australians. Our whole-of-government approach brings with it many opportunities to build effective relationships with other government and non-government organisations.

www.facs.gov.au

CAT:

The Centre for Appropriate Technology is Australia's national Indigenous science and technology organisation. We work to increase the access of Indigenous people to a range of technical services that enable them to live safely and happily in communities, often in remote locations.

www.icat.org.au

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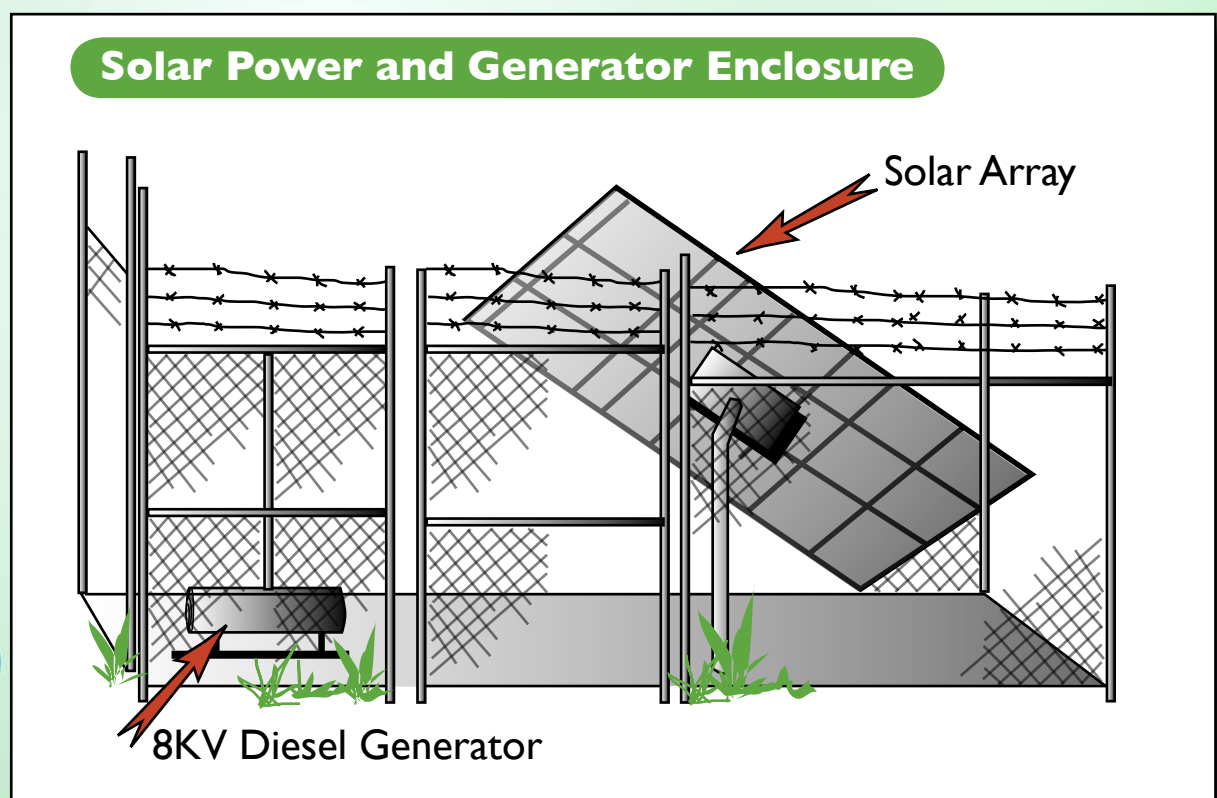
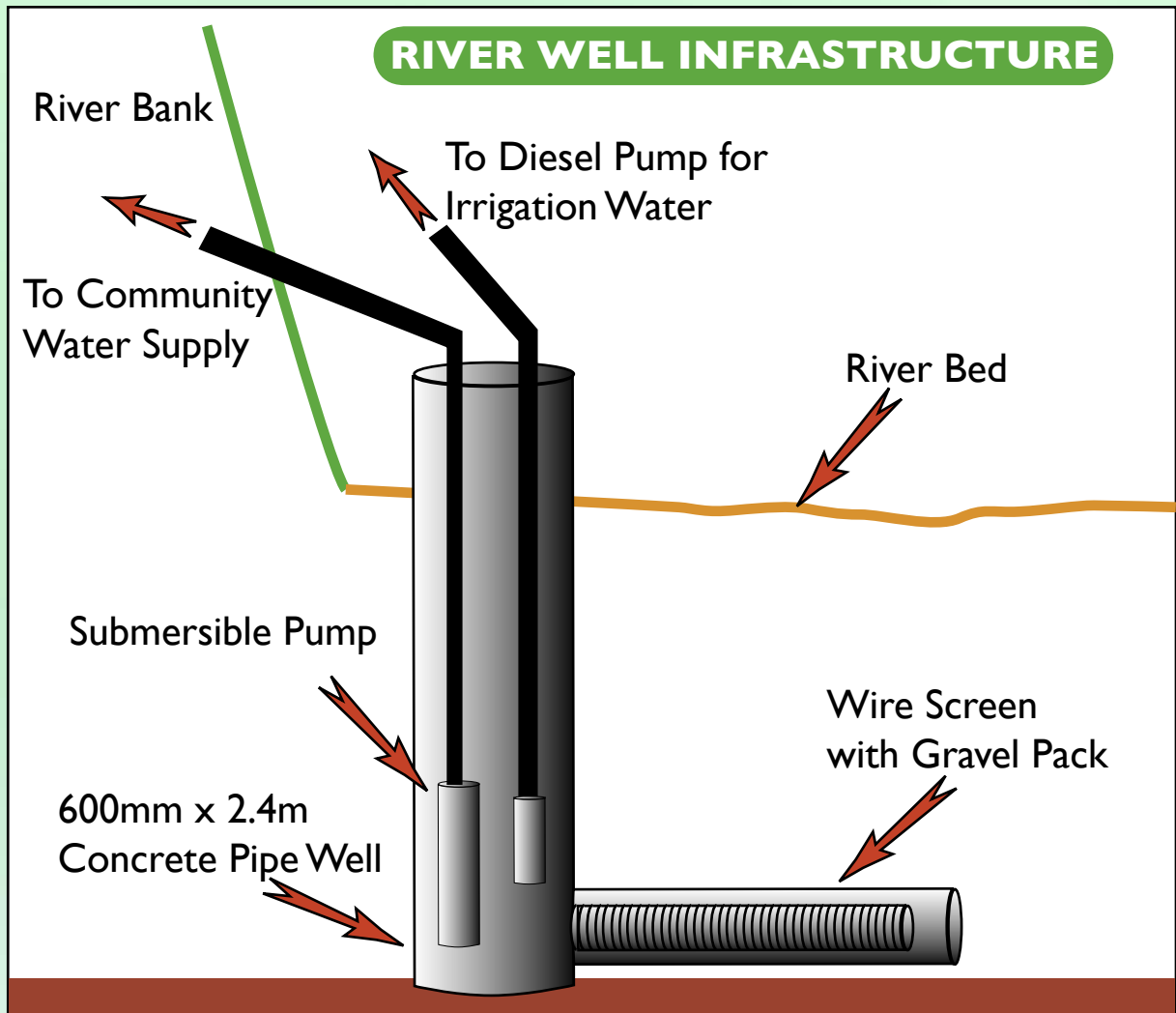


Australian Government

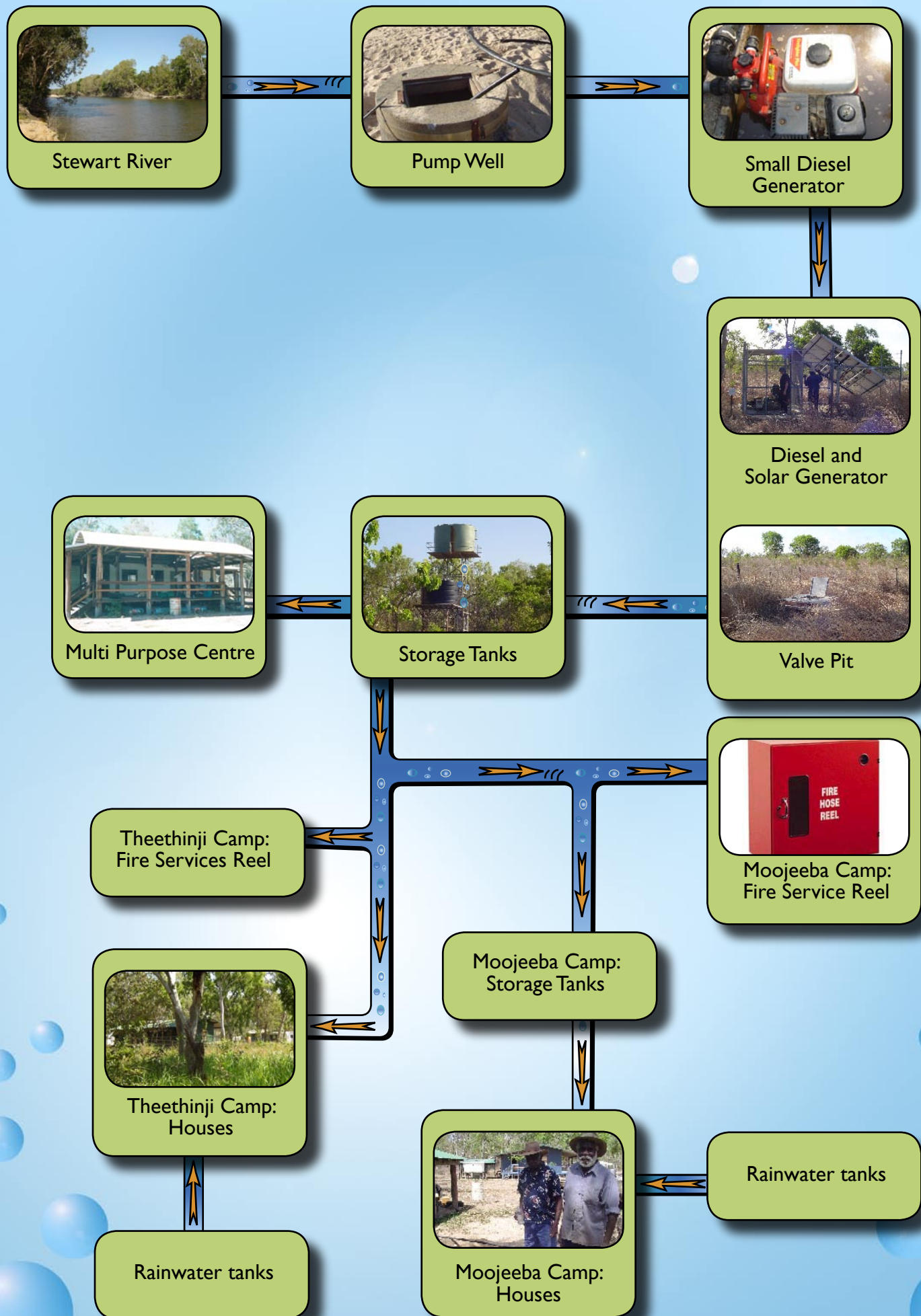
Department of Families, Community Services
and Indigenous Affairs



Port Stewart Water Supply Infrastructure



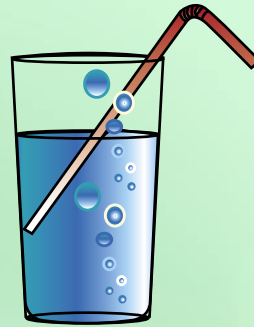
Port Stewart Water Supply System Schematic



Best Water to Drink



Flowing Water



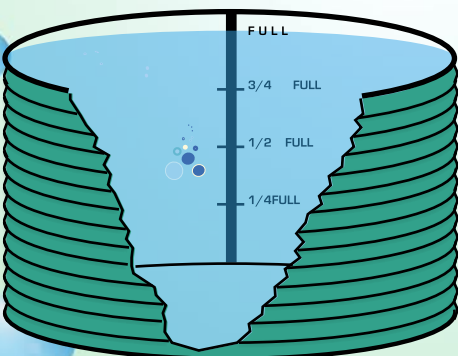
The water should be OK to drink when the river is flowing.



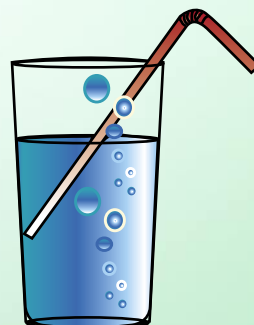
Dry River Bed



If the water is only in the well or if it looks brown or smells odd; it is better to drink rainwater.



Rainwater Tank



ALL THE TIME:
Rainwater OK!
Unless it is smelly or looks a funny colour or people are making complaints.

Special Events

Hazards and Risks:

Animals are getting to the water source in the river.

When the river is really low, the water in the well may taste bad and look a different colour.

After heavy rain or flooding the river water may have a lot of materials and dirt in it.

Fires along the river can cause poor water quality for a while until the plants re-grow.

The pump or other river intake equipment is damaged and the high tank cannot be filled.

Diesel or chemicals have been spilt into the river or well.

Animals are entering the storage or rainwater tanks.

All sources of water are low. There may not be enough for washing and drinking.

Preventative Measures:

Put up a fence and check that animals are not using the water. Boil water or use rainwater for a few weeks after the fence has gone up.

Use the rainwater for drinking until the river starts to flow again.

Use the rainwater tanks for drinking until the colour of the river returns to normal.

Try to limit fires along the river edge. Watch the quality of the water after a big fire. Switch to rainwater for drinking if there is ash or particles in the water.

Check the equipment and arrange to get it fixed. Use a spare pump if available. Reduce water use at the community while repairs are being done.

Check the water quality carefully, and if the river is flowing it may be safe to use the well again once the chemical has washed away. Empty and re-fill the high level tank once the water is safe.

Remove any dead bodies, flush the tank out and ensure that the lid is fixed so animals cannot get in. Chlorinate the tank.

Contact CRAC and get an emergency supply of drinking water. Reduce use for washing, watering gardens. Limit tourist visits during this time.

Emergency Contact Information

Agency:

Details:

Phone Number:

Tropical Population
Health Unit

Cnr. Grafton
& Aplin Sts., Cairns

07 4050 3600

Cook Shire

Coen Office

07 4060 1117

Police

Coen Police

07 4060 1150

Ambulance

Coen Clinic

07 4060 1166,
24 hours

Water Laboratory

Cairns Water

07 4044 8344

CRAC

Taylor Street,
Coen, Queensland

07 4050 1192
Fax 07 4060 1179

SES

Emergency Call Out,
Megan

07 4060 1192
Home 07 4060 1020
Mobile 0429 940 749
Port Stewart Mobile
0420 111 179

Moojeeba

Big House

07 4060 3275

Chlorinating your Water Tank

You may want to chlorinate your water tank if:

- A new tank has been installed.
- People are complaining that the water may have made them sick or a dead animal has been found on the roof or in the tank.
- There has been a special event like maintenance – such as emptying sludge from bottom of a tank.

Regular chlorination of the tank should not be necessary.

Follow these steps:

- Measure the water level in the tank.
- Determine the amount of chlorine or bleach needed. For every 1000 Litres of water in the tank use approximately 40 ml of liquid pool chlorine or 125 ml of bleach.

Note:

When dealing with chlorine or bleach ensure you are wearing rubber gloves and goggles to protect your eyes.

IMPORTANT:

Use a non perfumed chlorine bleach such as White King. Do not use stabilized pool chlorine or tablets (chlorine cyanurates).

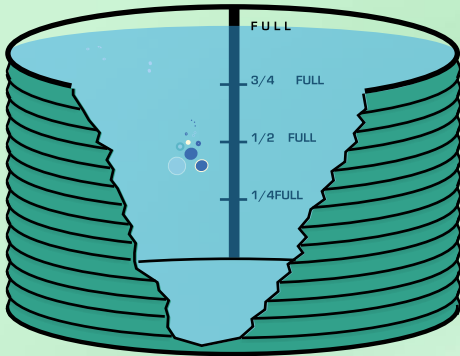
- **Dilute the chlorine/bleach in a bucket.**

Note:

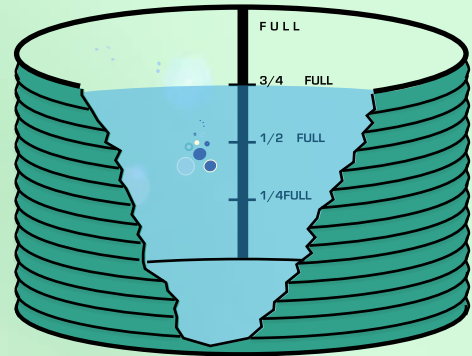
ALWAYS ADD THE CHLORINE TO THE WATER NOT THE WATER TO THE CHLORINE!

- Use a jug or similar to spread the chlorine or bleach across the whole surface of the water using a casting motion to ensure it is distributed evenly.
- Stir the tank (if possible) to mix in the chlorine/bleach.
- Let stand for about 24 hrs.
- Test the water in the tank using pool chlorine test strips. If it turns pale pink it is OK. If it turns purple, wait 12 hours and retest. Keep testing until the test strip turns pink.

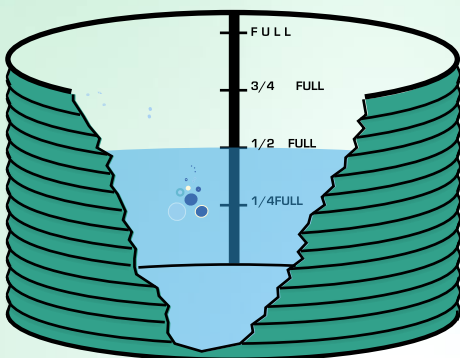
Chlorinating your Water Tank



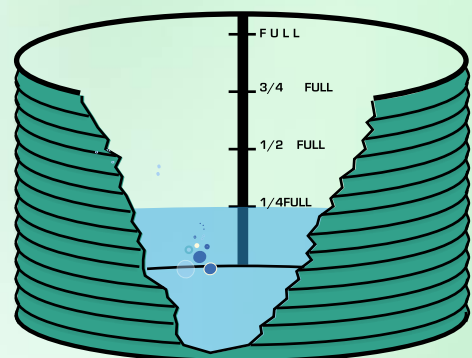
Amount of water in the rainwater tank:
Full (19,000 litres)
Height of water level: 2.5m
Amount of pool chlorine to use: 760 ml (approx 3 cups)
Amount of bleach to use: 2.375 litres (approx 1 bottle and a cup)



Amount of water in the rainwater tank:
Three quarters full (14,250 litres)
Height of water level: 1.95m
Amount of pool chlorine to use: 570 ml
Amount of bleach to use: 1.8 litres



Amount of water in the rainwater tank:
Half full (9,500 litres)
Height of water level: 1.3m
Amount of pool chlorine to use: 380 ml
Amount of bleach to use: 1.2 litres



Amount of water in the rainwater tank:
Quarter full (4750 litres)
Height of water level: 65cm
Amount of pool chlorine to use: 190 ml
Amount of bleach to use: 588 ml (approx 2 cups)

