

Self-supply water tank guidelines

The Buller District Council (BDC) supplies this information to rural property owners, who are sometimes not fully aware of the maintenance requirements or operation of their water tank system.

Typical water tank supplies

Water is usually captured from a building's roof gutters and gravity fed into a supply tank. The water is either pumped directly into the dwelling's plumbing, or pumped to a header tank that then feeds the plumbing via gravity.

Source water quality

It is vital to ensuring water quality and safety that you regularly clean your gutters and roof.

Keeping your gutters and roof clean markedly improves your water quality. Things like leaves, moss, bird droppings and slime can all find their way into your water tank – affecting water taste, clarity, quality and, most importantly: water safety.

Water Treatment

To protect the health of yourself, your family and visitors, BDC strongly recommends installing basic water treatment and safety measures.

As a minimum, BDC recommends:

- 1) Leaf diverters on all downpipes that feed the tank to stop leaves, sticks and mosses entering your tank.
- 2) A 'first flush' device that stops the initial flow from entering your tank – diverting dirt, ash and bird droppings that may accumulate on your roof between rainfall events.
- 3) 1- and 20-micron water filters (these capture organic chemicals and pollutants).
- 4) UV lamp and sleeve (doses the water with ultraviolet light and kills most bacteria and viruses).

A filter and UV system for a regular household should cost between \$1,200-\$1,500. Leaf diverters are easy to self-install and cost around \$40. First flush diverters can also be self-installed for around \$100 for a manually emptied version – or \$150 for one with a programmable automatic empty and reset.

Water that has an odour or is not clear should not be consumed without being brought to the boil for one minute. You should arrange for emptying, cleaning and sterilising your tank immediately and consider lightly dosing with an unscented bleach if this can't be done quickly (ratio: 70 ml per thousand litres).

Regular maintenance

All water tanks will build up sediment. This can be a source of contamination and cause damage pumps and fittings. Water tanks should be emptied and cleaned annually. There are a number of tank cleaning companies that service our district, and these can be found online.

Your gutters and downpipes should also be regularly cleaned, at least every three months. When cleaning your gutters and pipes, first make sure your tank is disconnected from the supply or a diverter is installed and operating correctly. A thorough scrub with hot water, lightly dosed with some bleach is often all you will need. Hose them thoroughly before re-establishing connection to the tank. Also have a look at your roof - consider washing it down or giving it a sweep with a wet broom.

Things to watch out for

If your pump is running often, or when water is not being used, this may indicate that you may have a leak in your plumbing or treatment system.

If your water has an odour or isn't as clean as it once was, you may need to replace your filters, clean your gutters or have your tank emptied and sterilised. Ash settling on your roof may impart a smoky smell to your water and this can often be fixed by installing a carbon filter before the water enters your house.

If your water pressure is dropping, this could signal that there is an issue with your pump, your filters are blocked with sediment, or you have a leak or blockage in the plumbing.

Examples of basic treatment equipment

Leaf diverter



UV and filter plant



First flush diverter



Tank diverter

