

# Understanding water quality

## How do we produce high quality water?

A great deal happens behind the scenes to ensure that each time our customers turn on the tap, they enjoy good quality water.

South East Water supplies water from either Melbourne's closed catchment reservoirs or from one of Melbourne's two water filtration plants: Winneke or Tarago.

The water supplied from Melbourne's closed catchments requires very little treatment as it comes from some of the most pristine forests in the world. Human access to these catchments is heavily restricted and farming is not permitted in these areas. The water from these catchments only needs to be chlorinated, fluoridated and pH adjusted to make it safe to drink.

Winneke and Tarago are water filtration plants that remove sediment and pathogens from the water. After the water is filtered it is then chlorinated, fluoridated and pH adjusted to produce water of the highest quality.

Once the water is chlorinated and enters the water distribution network, it does not see the light of day again until it comes out of your tap. This ensures that the water cannot become contaminated as it travels through the large network of tanks and pipes to your house.

Over 8,000 water samples are taken per year as the water flows through the distribution network to your home. This ensures that all the water supplied meets the strict requirements of the Safe Drinking Water Regulations and the Australian Drinking Water Guidelines

## Do I need to filter my water?

You do not need to filter your tap water because the water supplied to you by South East Water is so good. South East Water has done all the hard work in ensuring your water is always safe to drink. For more information about water filters, visit [southeastwater.com.au](https://southeastwater.com.au)

## Common water quality concerns

Despite the fact that our customers receive high quality water, we occasionally receive enquiries on the following water quality topics.

### Brown water

If your water is brown, it may contain rust or natural sediment and organic material. While brown water is not very nice to look at, it is still safe.

#### What causes it?

- Rust in your water is caused by aging galvanised pipes on your property.
- Water naturally contains low levels of sediment. As water flows through the reticulation system the sediment drops out of the water and, over time, this sediment can build up in the main. When the flow of water increases significantly, the sediment in the main can be stirred up causing the water to turn brown.

#### How can I minimise it?

- If rust is present in your water, you can flush your tap as a temporary measure, or replace old pipes with new ones made from an alternative material.
- If the water is brown at your front tap, it is likely the colour is from the sediment in the main that has been stirred up. Please contact us to investigate.

### White water

White water is water that contains very fine air bubbles. It is safe to drink.

#### What causes it?

- Fine air bubbles in your water can be caused by aeration from your hot water service.
- Air trapped in water mains during maintenance activities can cause white water.

#### How can I minimise it?

You can determine if the white water is due to air bubbles by filling a glass and leaving it to sit for an hour or so. The white appearance will clear, usually towards the top of the glass. If the problem persists, contact us to investigate.

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## Chlorine smell

Customers sometimes smell chlorine in their water. The addition of chlorine ensures our water is safe to drink. The health limit for chlorine in drinking water is 5mg/L, which is over three times the dose used at the treatment plants. Generally, the level of chlorine in South East Water's supply network cannot be tasted.

### What causes it?

- Chlorine levels at your house can vary depending on the age of the water (how long it took to get to your house), the temperature of the water, and how much chlorine the water itself consumes.
- Chlorine in the water can react with sediment in the water main, causing the chlorine smell to increase. The water is still safe to drink.

### How can I minimise it?

To remove the chlorine smell, fill a jug with water and allow it to stand for a couple of hours, enabling the chlorine to dissipate. If you are still concerned, contact us to investigate.

## Stale water

If your water has a stale taste or odour, it may be due to water sitting in unused pipes over a period of time. The water is safe to drink but may not be aesthetically pleasing.

### What causes it?

- Water from low usage areas of the house can have a stale taste as it has been sitting in the internal plumbing for some time.
- Dead end mains or areas with a very low flow can cause stale water.

### How can I minimise it?

Give all taps a good flush to freshen up the water inside your house. If this does not rectify the problem contact South East Water to investigate.

## Pink staining

Pink staining or residue on sinks, baths, toilet bowls, shower tiles or pets' bowls is not a water quality issue.

### What causes it?

- It is caused by airborne bacteria, *Serratia marcescens*, which naturally occurs in soil, food and animals. The growth of the bacteria produces a pinkish film on surfaces that are regularly moist, such as bathrooms. The pinkish film can also appear during or after new construction or renovating activities, as airborne particles such as dirt and dust can contain the bacteria.
- Pink staining is random in its occurrence – it can be unique to one house in a street and not observed at any neighbours' properties.

### How can I minimise it?

Keep the affected areas dry and maintain good ventilation to prevent the bacteria from growing. You can clean affected areas with a chlorine-based cleaning solution, such as bleach. Please note that ammonia-based cleaners provide a food source for the bacteria, encouraging growth and making the problem worse.

