

FACT SHEET

BACKFLOW PREVENTION

Backflow prevention is the control of unintended and potentially contaminated water entering Council's potable (drinking) water supply from cross connections or backflow.

Council's water supply system is designed to ensure water flows from our water mains to a property under pressure. If this pressure is not maintained there is a chance water can be drawn into the mains water supply by cross connections or backflow.

HOW CAN BACKFLOW OCCUR?

Backflow occurs when water is pulled backwards due to pressure loss in the water main or is pushed back by a pressure sources such as a well pump or by a cross connection between the drinking water supply and other water or fluids of unknown quality.

This happens in two ways:

- **Back Siphonage** - when negative pressure occurs in the main and contaminated liquids enter the potable water supply by siphonage, for example a garden hose submerged in a swimming pool, tank or pond.
- **Backpressure** - where pressure downstream becomes greater than pressure upstream of a cross connection allowing water or other contaminated liquids to enter the potable supply, for example a rainwater tank with a pressure pump interconnection with the mains water supply.

WHY ARE BACKFLOW PREVENTION DEVICES REQUIRED?

Backflow prevention device is an important part of protecting Council's potable (drinking) water supply and must be installed at a meter for all properties connected to the water supply. A properly working and maintained backflow device will prevent potentially contaminated water from flowing in the wrong direction.

What are my responsibilities for backflow prevention?

Council is responsible for exercising a duty of care in protecting the drinking water supply and safeguarding public health within in its supply area as per Council's Operating License and relevant legislation. This includes ensuring adequate backflow prevention is in place. Council maintains a register of installed testable backflow prevention devices and annual reports.

The property owner is responsible for arranging a licensed and backflow accredited plumber to install, maintain and annually test the backflow device(s) on their property.

The plumber is responsible for forwarding passed testable backflow prevention device certified test reports to Council for recording.

Tenants are not responsible for backflow prevention devices.

WHO NEEDS TO INSTALL A BACKFLOW PREVENTION DEVICE?

Testable backflow devices are required under Australian Standards *AS2845: Water Supply - Backflow Preventions* and *AS3500: Plumbing and Drainage* for any premises identified as

posing a risk to the public drinking water supply including all commercial, industrial and multi-property residential customers.

WHICH BACKFLOW PREVENTION DEVICE DO I NEED TO INSTALL?

The hazard rating of the processes carried out on your property will determine what type of device you need to install.

The three hazard ratings identified by AS/NZ 3500.1 are:

- **High Hazard**—any condition, device or practice which in connection with the water supply system has the potential to cause death.
- **Medium Hazard**—any condition, device or practice which in conjunction with the water supply system could endanger health.
- **Low Hazard**—any condition, device or practice which in connection with the water supply system could constitute a nuisance but not endanger health.

Because processes differ within each property type, you will need a backflow accredited plumber to determine your property's hazard rating and which device is suitable for your property.

WHAT ARE THE INSTALLATION REQUIREMENTS OF BACKFLOW DEVICES?

Backflow prevention devices are to be located at the boundary of the property at the outlet of the water meter.

All backflow devices must be installed and tested by a licensed and backflow accredited plumber. Test results and payment of relevant fees must be sent to Singleton Council within two (2) days of commissioning the devices if the device has passed testing. If the device fails testing it must be repaired and retested.

The backflow devices must not be located in pits or below ground level as the pit may fill with water and cause a backflow incident.

WHO PAYS FOR THE DEVICE AND ITS INSTALLATION?

It is the responsibility of the property owner to pay for the device, installation and annual tests for testable devices.

If the use of a property changes and the hazard rating is increased, the property owner must have a licensed and backflow accredited plumber certify the change in hazard rating and inform Council.

ANNUAL TESTING

Customers who have a testable backflow device installed are required to have the device tested at least every 12 months.

Annual testing is mandatory under AS3500 and ensures that the backflow device continues to operate correctly. Backflow devices have internal seals, springs and moving parts that are subject to wear and fatigue. A defective device can:

- Cause a backflow incident;
- Allow water to escape through leaking devices; and
- Reduce the water pressure to your property.

WHAT IF A DEVICE FAILS ANNUAL INSPECTION TESTING?

Only test reports for devices that have passed testing and inspection are to be sent to Council for recording. If a device has failed an inspection test, the property owner is to arrange to have the device fixed or replaced and retested with the passes test report forwarded to Council.

WHAT HAPPENS IF I DON'T COMPLY WITH BACKFLOW REQUIREMENTS?

It is an offence not to install, repair, maintain, replace or test a backflow device as



requested by a notice issued by Council. If you do not comply, Council may carry out the required work and charge you for the service. Singleton Council may disconnect or restrict the customer from the public water supply system until they comply with the notice.

RELATED INFORMATION

- [Water Supply Services Policy](#)
- [Water and Sewer Group - Customer Service Plan](#)

FURTHER INFORMATION

For more information on your water service contact Council on:

T. 02 6578 7290

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W. www.singleton.nsw.gov.au

