

# Backflow Prevention Devices

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This factsheet provides information in relation to Backflow Prevention Devices ('BFPD').

## What is backflow?

Backflow is the reversal of water flow from its normal or intended direction of flow. Council connects a customer to its water distribution system and the intention is for the water to flow from the distribution system to the customer.

It is possible and common for the flow to be reversed and flow from the customer's plumbing system back into the Council water distribution system.

Should this occur, it is possible for unsanitary water from the customer's plumbing system to be sucked back into the Council water distribution system. If the water in the customer's system has come into contact with harmful substances and it backflows into the Council water distribution system, it could cause illness or, in extreme cases, death.

## What causes backflow?

Backflow is usually caused by back-pressure or back-siphonage. Back pressure is caused where the water pressure within a customer's plumbing system exceeds that of the Council water distribution system supplying it.

Back pressure can result from an increase in pressure on the customer's side – due to pumps, steam boilers, or other means, or from a decrease in pressure in the Council water distribution system due to water line flushing, firefighting, or water main breaks.

Back siphonage is caused where there is a loss of water pressure causing a negative pressure (for example, vacuum) within the water distribution system. The effect is like drinking water through a straw. This can occur due to a nearby firefighting, water main breaks, water line flushing, or other situations that cause a significant loss in water system pressure.

## Where are the most common cross-connections?

Whenever a plumbing fixture is connected to the Council water distribution system, a potential cross connection exists. Some examples of cross-connections that can lead to backflow are;

- wash basins and service sinks;
- laboratory equipment;
- irrigation or lawn sprinkler systems;
- swimming pools and spas;
- fire sprinkler systems;
- firefighting services (hydrants and hose reels);
- air conditioning cooling towers;
- vehicle washing facilities;
- auxiliary water supplies (wells, storage tanks);
- photo developing equipment;
- chemical feed equipment;
- food and beverage processing equipment; or
- boilers.

## Why do I have to install a backflow prevention device ('BFPD')?

The *Plumbing and Drainage Regulation 2019* (Qld) ('Regulation') states that an appropriate BFPD must be installed on premises if pollution of the water supply on the premises has been, or could be, caused by the plumbing on the premises.

As a water supplier, Council has a responsibility to provide safe drinking water under all foreseeable circumstances to its customers.

## What is a backflow device?

Backflow assemblies are devices placed on potential cross-connections to prevent water from flowing back into the Council water distribution system. The most common type of testable backflow devices are a Reduced Pressure Zone device ('RPZD') and a Double Check Valve device ('DCV'). Both the RPZD and DCV type backflow prevention devices are testable to ensure they are in proper working order.

Placed just downstream of a water meter to a premises, they can protect the Council water distribution system from any contamination that may occur within the entire establishment's plumbing system.

## Does my backflow device need to be tested?

**Yes.** In accordance with testable backflow prevention devices in the Regulation, Council must implement and maintain a program for its Council area for the registration, maintenance and testing of testable BFPDs installed in the area.

As per the Regulation, a certified tester must check all backflow assemblies: at the time of installation; annually after installation; after repairs; and after relocating. Backflow device testers are private plumbing contractors who possess valid and current certification and are certified by the Queensland Building and Construction Commission. Certified testers must submit a report to Council following the test.

## Further Information?

For further information about backflow prevention devices, you can contact Council via one of the following methods:

- ✉ South Burnett Regional Council  
PO Box 336  
KINGAROY QLD 4610
- ☎ (07) 4189 9100
- @ [info@sbrc.qld.gov.au](mailto:info@sbrc.qld.gov.au)
- 👤 Visiting a Customer Service Centre