



Cross Connection Control & Backflow Prevention Policy

POLICY OBJECTIVE

The objectives of this policy are:

- To minimise public health risk
- To protect the potable water quality supply within Council's water reticulation system
- To ensure cross-connection control is properly managed within properties undertaking non-domestic activities
- To ensure compliance with relevant legislation

LEGISLATIVE PROVISIONS

Local Government Act 1993

Public Health Act 2010

National Construction Code Series – Volume 3 Plumbing Code of Australia

Australian /New Zealand Standard AS/NZS AS3500.1

Australian Standard AS2845.(1,2&3)

Plumbing & Drainage Act 2011

Plumbing & Drainage Regulation 2012

Australian Drinking Water Guidelines 2011

POLICY STATEMENT

Maintaining the integrity of the distribution system is the most important barrier to preventing contamination of a disinfected water supply. The regulation of cross connection control and backflow prevention plays a major role in ensuring the distribution system is not compromised.

State Government and Australian Standards have guidelines to regulate cross-connection control and backflow prevention. These guidelines require the Local Water Authority to take measures to ensure compliance and assist in the protection of public health.

Backflow can be defined as the unintended flow of water from a potentially polluted source into the potable water supply. Backflow can be caused by either back pressure from pressurisation equipment on the customer's property or by siphonage caused when the pressure in the water supply system falls below atmospheric pressure.

APPLICATION

- This policy applies to all new and existing customers and properties connected to Council's drinking water supply.
- All customers with a connection to Council's drinking water supply must have a boundary containment device installed for backflow prevention appropriate to the property hazard rating.
- Property hazard ratings are determined based on the level of hazard of activities or processes carried out within a property. Where more than one activity or process occurs on the site, the

property hazard rating will be equal to, or greater than, the highest identified hazard. The three degrees of hazard and their definitions are detailed in Section 4 of AS/NZS AS3500.1

- Where the hazards are unknown for commercial, industrial or mixed development, the hazard rating will default to high, requiring the installation of backflow prevention devices appropriate for that hazard rating
- The installation and maintenance of all required backflow prevention devices are the responsibility of the property owner.
- Council will maintain a register of all testable backflow prevention device installations and annual maintenance records.
- A backflow prevention device annual fee will be charged to the property owner by Council at the start of each financial year for all registered testable devices.
- If a property owner fails to install, repair, maintain, replace or test a backflow prevention device as required by a notice issued by Council, Council may disconnect (in the case of a non-residential property) or restrict (in the case of a residential property or mixed development) the customer from the drinking water supply system until such time as the customer has complied with the notice. Reconnection fees will apply.

INSTALLATION AND MAINTENANCE REQUIREMENTS FOR BACKFLOW PREVENTION DEVICES

- A list of device types and their suitability for different hazard ratings can be found in Table 4.4.1 of AS/NZS AS3500.1
- The boundary containment device for a metered service must be installed immediately downstream of the water meter.
- The boundary containment device for a fire service must be installed as close as possible to where the water service crosses the property boundary and upstream of any fire hydrant take off points or booster sets.
- Prior to the installation of any backflow prevention devices Council must be provided with a NSW Fair Trading "Notice of Work" for each device to be installed. A backflow device registration fee must be provided to Council for each device at the time of submitting the Notice of Work.
- Within 5 working days of the installation of any backflow prevention devices Council must be provided with a NSW Fair Trading "Certificate of Compliance" for each device that has been installed.
- Within 5 working days of the installation of testable backflow prevention devices Council must be provided with a backflow prevention device inspection and maintenance report for each testable device that has been installed.
- All testable backflow prevention devices must be checked annually by a licensed plumber with backflow prevention accreditation. A backflow prevention device inspection and maintenance report must be submitted to Council within five working days of the device being tested.

PROPERTIES WITH BOTH DRINKING WATER AND NON-DRINKING WATER SERVICES ONSITE (NOT INCLUDING RAINWATER)

Non-drinking water services means all water that is not intended, or not likely to be used for human consumption, or for purposes connected with human consumption. Including but not limited to:

- a) Bore water
- b) Grey water
- c) Dam water
- d) Bio-cycle / septic tank, reclaimed effluent

The risks to health from non-drinking water supplies will depend on the type and concentration of contaminants present. Some non-drinking water supplies such as dam water or groundwater may look and smell perfectly fine however many activities in urban areas may contaminate non-drinking water sources making it unsafe and its use may lead to adverse health effects.

- Non-drinking water installations must comply with all requirements of Section 9 of AS/NZS AS3500.1.
- The minimum containment protection required for a single residential dwelling with a non-drinking water service that complies with the requirements of Section 9 of AS/NZS AS3500.1 is a non-testable dual check valve with atmospheric port.
- The minimum containment protection required for a single residential dwelling with a non-drinking water service that does not comply with the requirements of Section 9 of AS/NZS AS3500.1 and/or where compliance with Section 9 of AS/NZS3500.1 cannot be verified is a Reduced Pressure Zone Device.
- The minimum containment protection required for properties other than a single residential dwelling with a non-drinking water service that complies with the requirements of Section 9 of AS/NZS AS3500.1 is a Reduced Pressure Zone Device.

BACKFLOW PREVENTION REQUIREMENTS FOR PROPERTIES WITH RAINWATER TANKS

Where provision is made for augmentation of the rainwater supply by either top-up of the rainwater tank with water from Council's drinking water supply, or by connection of Council's drinking water supply to any point downstream of the rainwater tank outlet, the installation shall comply with all requirements of Section 14 of AS/NZS AS3500.1.

- The minimum containment protection required for a single residential dwelling with an above ground rainwater tank installation is a non-testable dual check valve.
- The minimum containment protection required for a single residential dwelling with a buried or partially buried rainwater tank installation is a non-testable dual check valve with atmospheric port.
- The minimum containment protection required for properties other than single residential dwellings with above ground rainwater tank installations is a non-testable dual check valve.
- The minimum containment protection required for properties other than single residential dwellings with buried or partially buried rainwater tank installations is a Reduced Pressure Zone Device.

EXEMPTIONS

Exemptions for existing premises in CBD with restricted drainage access

It is recognised that it may be impractical to install testable devices for boundary containment in some existing properties in the CBD due to the water meter being located in the footpath or inside in cupboards etc with restricted access to drainage. In these instances Council will assess the backflow hazards on the property and will consider the installation of a non-testable device as boundary containment subject to the following:

- The water meter must be located in a position which prevents the installation of a testable device without major structural modification to the property
- The only high backflow hazard on the property is a hose connection used for cleaning of a grease arrestor and or oil separator.
- The hose connection used for cleaning the grease arrestor or oil separator must be provided with individual or zone protection by a RPZD.
- The exemption from the requirement to install a RPZD as boundary containment will apply to the existing property owner only.
- If the property is to be sold and or renovated in any way modifications to the meter location will be required and the non testable device being used for boundary containment must be removed and replaced with a testable device appropriate for the hazard rating of the property.

| Version | Council Meeting Date | Resolution | Adoption Date | Effective From |
|--|----------------------|------------|------------------|------------------|
| 1 | 17 July 2007 | 07/365 | 17 July 2007 | 17 July 2007 |
| 2 | 18 November 2008 | 08/735 | 18 November 2008 | 18 November 2008 |
| 3 | 21 June 2011 | 11/220 | 17 August 2011 | 17 August 2011 |
| 4 | 19 March 2013 | 13/81 | 10 May 2013 | 10 May 2013 |
| 5 | 3 May 2016 | 16/171 | 6 June 2016 | 9 June 2016 |
| 6 | 2 May 2017 | 17/148 | 2 May 2017 | 2 June 2017 |
| 7 | 3 May 2022 | 2022/145 | 3 May 2022 | 31 May 2022 |
| All policies can be reviewed or revoked by resolution of Council at anytime | | | | |

DIRECTORATE: Utilities
BUSINESS UNIT: Water Operations