

Name of policy:	Backflow Prevention		
Adoption by Council:	11 December 2024	Minute number:	479/2024
Last review date:	March 2024		
Review timeframe:	4 years		
Next scheduled review date:	March 2028		
Related legislation:	<p><i>Local Government Act 1993</i></p> <p><i>Plumbing and Drainage Act 2011</i></p> <p>Australian and New Zealand Standard (AS/NZS 3500.1) <i>Plumbing and Drainage Part 1: Water Services</i></p> <p>National Construction Code Series: Volume Three, Plumbing Code of Australia</p> <p>AS/NZS 2845.1:2022 Water supply - Backflow prevention devices - Materials, design and performance requirements</p> <p>AS/NZS 2845.3:2020 Water supply - Backflow prevention devices - Field testing and maintenance of testable devices</p> <p>AS/NZS 2845.2:2010 Water supply - Backflow preventions devices - Registered air gaps and registered break tanks</p>		
Associated policies/documents:	Backflow Prevention Procedure		
Responsible division:	Infrastructure and Engineering Services		

Policy objective

This policy governs the process and requirements for the installation, testing and maintenance of backflow prevention devices. The policy is intended to ensure that public health risks are minimised through the installation of backflow prevention devices, with the purpose of this being to protect the quality of the potable water supply within Council's water reticulation system from unintended cross connection and backflow of contaminants.

This policy provides guidance to both staff and customers on the requirements for the installation, testing and maintenance of backflow prevention devices.

Policy statement

Backflow prevention refers to the control of potentially harmful contaminants into the water supply system and is applicable to both new and existing water supply connections. The

level of backflow prevention is determined from the site hazard rating by Council or a registered plumber with backflow accreditation.

The installation of an appropriate backflow prevention device is required for each new and existing connected property. Council will maintain a backflow prevention system which protects the integrity of the potable water supply network and the health and safety of customers.

Coverage of the policy

This policy applies to all properties connected/ or intending to connect to Council’s potable water supply network. The policy outlines the requirements of both Council and the property owner in relation to the installation, testing and maintenance of backflow prevention devices.

Strategic Plan link

Community Outcome 1: A resilient and socially connected community

<p><i>1.4 We protect the health and safety of our communities</i></p>	<p><i>1.4.2 Provide safe and sustainable networks of water, sewer and stormwater systems to meet community needs and health and safety standards</i></p>
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Policy content

- All properties connected to the Council’s potable water supply network shall ensure that a backflow prevention device is installed in accordance with the provisions of the Australian and New Zealand Standard for Plumbing and Drainage Part 1: Water Services (AS/NZS 3500.1), the Plumbing Code of Australia and Council’s connection requirements.
- The hazard rating of all properties connected to the potable water supply network must be determined by a licensed plumber with appropriate backflow accreditation in accordance with AS/NZS 3500.1.
- 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 in accordance with AS/NZS 3500.1.
- Where the hazards are unknown for a commercial, industrial or mixed development, the hazard rating will default to ‘high hazard’ requiring the installation of a device appropriate for that hazard rating in accordance with AS/NZS 3500.1.
- If the use, and hence the hazard rating, of a premises changes, the customer shall install the appropriate backflow prevention device applicable to the hazard rating of the new use.
- All properties with a potable water connection that present a medium or high hazard rating must install and maintain an appropriate testable backflow prevention device at the property boundary for site containment protection purposes in accordance with AS/NZS 3500.1.
- Low hazard meter installations shall be protected through the provisions of a Council supplied water meter, which incorporates a backflow prevention device, at time of connection.
- The customer is responsible for the installation, maintenance and annual testing of the backflow prevention devices as required under AS/NZS 3500.1 for all devices other than

low hazard Council installed meters. An approved test certification report for these devices must be completed and forwarded to Council annually. Annual testing of all registered backflow devices shall be undertaken by a licensed plumber with appropriate backflow accreditation in accordance with the *Plumbing Code of Australia, AS/NZS 3500.1* and the *Plumbing and Drainage Act 2011*.

- If Council determines that the backflow prevention for a premise is unsatisfactory, a notice will be issued requiring the customer to repair, test, replace or install a suitable backflow prevention device(s). The customer must, at their expense, engage an accredited person to comply with the notice within the time specified in the notice.
- Where the 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.
- Council shall advise the customer, in writing, the date for which the device is required to be tested (only applicable to medium and high hazard ratings).
- Where instructed by Council, the customer shall submit test certification of the satisfactory operation of the backflow device to Council within 30 days of the issue of the advice. Where the customer fails to provide the certification by the due date, Council may do one or more of the following:
 - Issue of an order under section 124 of the *Local Government Act 1993*
 - Test and certify the device and charge a fee to the customer in accordance with Council's Fees & Charges
 - Disconnect (non-residential) or restrict (residential) the water service if Council believes that the hazard presented by the activities on the property presents an unacceptable risk to the water supply and charge a fee for the disconnection/reconnection.
- Council will maintain a register of all current testable backflow prevention devices and annual test reports.
- When the current use of the site does not align with the level of backflow protection, Council may issue notice to the property owner detailing the areas which are unsatisfactory and identifying the rectification that is required.
- Changes in water pressure may occur due to the installation of a backflow prevention device. The customer must at their expense, engage a hydraulic consultant to determine if augmentations are required to meet internal pressure requirements.

Definitions

<i>Backflow</i>	<i>Water flow in the opposite direction than intended. This may cause potable water to mix with dirty or contaminated water.</i>
<i>Potable Water Supply</i>	<i>A water distribution system that carries water from a treatment plant to a customer for residential, commercial, industrial or fire-fighting requirements.</i>

<i>Backflow Prevention Device</i>	<i>A device to prevent the reverse flow of water from a potentially contaminated source.</i>
<i>Backflow Zones</i>	<p>Containment: <i>A backflow device installed between the private water service and the larger water supply. Usually located at the meter.</i></p> <p>Zone: <i>A backflow device installed at specific locations across the site to protect one section from another.</i></p> <p>Individual: <i>A backflow device installed on a specific fixture or appliance such as a bidet.</i></p>
<i>Hazard Rating</i>	<p><i>An assessment of the potential risk posed by a water system as per Australian Standard AS/NZS 3500.1. The rating system considers the risk and consequence of contamination. There are three ratings:</i></p> <p>High Hazard: <i>Any condition, device or practice that, in connection with the water supply system, has the potential to cause death.</i></p> <p>Medium Hazard: <i>Any condition, device or practice that, in connection with the water supply system, has the potential to endanger health.</i></p> <p>Low Hazard: <i>Any condition, device or practice that, in connection with the water supply system, constitutes a nuisance but does not endanger health or cause injury.</i></p>
<i>Backflow Accreditation</i>	<i>Only licenced plumbers with backflow accreditation issued by a Registered Training Organisation can inspect, commission or test medium and high hazard backflow devices.</i>

References and related documents

- Water Directorate *Backflow Prevention and Cross Connection Control Guidelines 2013*
- *Local Government Act 1993*
- *Plumbing and Drainage Act 2011*
- Australian and New Zealand Standard (AS/NZS 3500.1) *Plumbing and Drainage Part 1: Water Services*
- Australian Drinking Water Guidelines 2011
- National Construction Code Series, 2012: Volume Three, Plumbing Code of Australia

Responsible officer (position)

Manager Water Planning and Assets

Attachments

Backflow Prevention Fact Sheet

Fact Sheet BACKFLOW PREVENTION

Backflow is the reverse flow of potentially contaminated liquid into the drinking water supply network. It is considered a serious threat to public health.

HOW DOES BACKFLOW OCCUR?

Backflow can occur when:

- The water pressure inside a property or building is higher than the pressure of the water supply network
- The pressure within the water supply network drops, often as the result of a burst main or excessive demand.

HOW CAN WE PREVENT BACKFLOW?

Backflow can be prevented by installing a backflow prevention device on your property. This device will need to be installed by a licenced plumber with backflow accreditation.

WHAT IS MIDCOAST COUNCIL'S RESPONSIBILITY?

It is Council's responsibility to keep our drinking water safe from potential contamination and ensure that properties are equipped with an appropriate backflow prevention device. Council also reviews annual test results from customers to ensure their devices continue to meet the required standards.

WHAT IS THE CUSTOMER'S RESPONSIBILITY?

If a customer is notified that their property requires a backflow prevention device, it is their responsibility to engage a licenced plumber with backflow accreditation to install the device in compliance with AS/3500 and NCC 2022. The device must then be tested on an annual basis by a licenced plumber and an annual registration fee will need to be paid to Council.

For more information about MidCoast Council's Backflow Prevention Policy, visit:

<https://www.midcoast.nsw.gov.au/plumbing>



A 50mm water meter with a backflow prevention device to prevent potential contamination

