



BACKFLOW PREVENTION POLICY

Summary:

The purpose of this policy is to provide clear direction on how business maintains its drinking water quality and reduces potential contamination through backflow prevention.

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File Number	
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Approved By	Council
Endorsed By	Executive Management Team
Minute Number	
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Department	Water & Waste Management
Policy Custodian	Manager Water & Waste
Superseded Documents	N/A
Related Legislation	Australian Drinking Water Guidelines 2017 Public Health Act 2010 (NSW) Public Health Regulation 2012 New South Wales Government Plumbing and Drainage Act 2011. Australian and New Zealand Standard (AS/NZS 3500.1) Plumbing and Drainage Part 1: Water Services National Construction Code Series: Volume Three, Plumbing Code of Australia
Delegations of Authority	Chief Executive, Directors, Managers

1. Overview

This Policy serves to ensure that Council has a responsibility to provide safe drinking water to the community. It is the responsibility of the property owner to ensure they do not affect the mains supply with any water from their property. Backflow is the undesirable reversal of flow of contaminated water into the potable

water supply. To prevent this from happening, a backflow prevention device is installed to stop the undesirable contaminant entering the potable water piping. Backflow prevention devices are required by Australian Standards, National Plumbing and Drainage Code (AS 3500.1) for the protection and conservation of safe drinking water. It is important for property owners who have backflow prevention devices to understand the importance of backflow prevention, as well as their responsibilities under the law to maintain these.

You will need a backflow device if you have any of the following on your property that is connected to Council's potable water supply:

- an irrigation system
- fire hose reels or fire hydrants
- commercial or industrial equipment or activities which could pollute the drinking water supply, such as air conditioning cooling towers or chemical cleaning areas
- water outlets in proximity to pollutants, grease traps or chemicals
- an alternate water supply, including rain water tanks (see policy 3.180 for [Rainwater Tanks Installation Requirements Where Reticulated Water Is Connected Policy](#)), bores or wells.

The type of backflow prevention device required depends on the hazard rating or the risk of possible contamination. Any property that drinking water enters is designated to be either a high, medium or low hazard area. These ratings are defined in AS3500.1

2. Policy Objectives

Council has a responsibility to provide safe drinking water to the community. It is the responsibility of the property owner to ensure they do not affect the mains supply with any water from their property through backflow.

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.

3. Policy Statement

This policy governs the process and requirements for the installation, testing and maintenance of backflow prevention devices. Council has implemented and will maintain a Drinking Water Management System to effectively manage the risks to drinking water quality and Safety mechanisms associated with Dam Safety.

4. Scope

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.
- 20mm & 25mm low hazard meter installations shall be protected through the provisions of the Council supplied water meter, which incorporates a backflow prevention device, at time of connection.
- The customer is responsible for the installation, maintenance and testing of the backflow prevention devices as required under AS/NZS 3500.1 for all devices other than low hazard 20mm and 25mm meter installations. An approved test certification report for these devices must be completed and forwarded to Council annually. Bi-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).
- Upon advice from Council of the need to do so, 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:
 - o Issue of formal notice under section 124 of the Local Government Act 1993
 - o Test and certify the device and charge a fee to the customer in accordance with Council's Fees & Charges
 - o 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 bi-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.

5. Accountability, Roles & Responsibility

Elected Council

Adopt the Backflow Prevention Policy and to continue to support the Drinking Water Management System and Dam Safety Management System.

General Manager, Executive and Management Teams

Adopt the Backflow Prevention Policy and to continue to support the Drinking Water Management System and the Dam Safety Management System.

Management Oversight Group

Continue to support and include system risk as described in the Australian Drinking Water Management Guidelines, Dam Safety NSW regulations and NSW Plumbing and Drainage Act.

Manager Water & Waste

Responsible for ensuring compliance with Policy, Regulation and guidelines.

Property Owners

Responsible for ensuring compliance with Policy, Regulation and guidelines, testing and providing test certificates to Council.

6. Definitions

High risk - Any condition, device or practice within the water supply system and its operation which has the potential to cause death. For this rating, reduced pressure zone devices (RPZD) are used. Examples of reduced pressure zone devices (testable)



Medium risk - Any condition, device or practice within the water supply system and its operation which could endanger health. In this instance, double check valves are used. Example of double check valve (testable)



Low risk - Any condition, device or practice within the water supply, where dual check valves are used. Example of dual check valve (non-testable)



7. Related Documents, Standards & Guidelines

Water Directorate (2013) Backflow Prevention and Cross Connection Control Guidelines.

New South Wales Government (2017) Local Government Act 1993.

New South Wales Government (2017) 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 2017

National Construction Code Series, 2012: Volume Three, Plumbing Code of Australia

Council Policy 2.162 Water Quality and Safety Policy.

Council Policy 3.180 Rainwater Tanks-Installation requirements where reticulated water is connected.

8. Version Control & Change History

Version	Date	Modified by	Details
V1.0	26/09/2022	Council	Adoption of Original Policy