Central Coast Council Backflow Prevention Policy

Date Adopted: 22/07/2025

Revision: 2



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1. Policy Objectives

- **1.1.** The Backflow Prevention Policy (**Policy**) aims to protect the quality of Central Coast Council's (**Council**) drinking and non-drinking water supply by minimising the risk of contaminated water backflow from connections to the water supply.
- **1.2.** The Policy specifies Council's requirements for the installation and maintenance of backflow prevention devices on high-medium and low hazard properties.
- 1.3. The Policy also specifies when testable backflow prevention devices are required to protect the water supply from contamination from a customer's water service and outlines backflow prevention requirements for customers with multiple water supplies that include drinking and non-drinking water supplies.

2. Policy Scope

- **2.1.** The Policy applies to all customer connections to Council's water supply.
- **2.2.** The Policy applies to all water connections, other than 20 mm and 25 mm connections providing drinking water to a single, low hazard residential dwelling.

3. Policy Statement

3.1. The Policy has been adopted to protect the quality of Council's drinking and non-drinking water supply and the health of our community by minimising the risk of contaminated water backflow from connections to the water supply. This can be achieved by ensuring that our customers install and maintain backflow prevention devices on their property in accordance with current Codes and Standards.

4. General

- 4.1. All customers connected to Council's water supply must comply with the requirements of the Plumbing Code of Australia (PCA) (National Construction Code Volume Three), the Australian Standard/New Zealand Standard 3500.1 Plumbing and Drainage Part 1: Water services (AS/NZS 3500.1) Sections 4, 6, 7, and Appendix E, and the Australian Standard/New Zealand Standard 3500.4 Plumbing and Drainage Part 4: Heated water services (AS/NZS 3500.4).
- 4.2. A property with a water connection within the scope of this Policy must be assessed for potential backflow hazard and shall install an appropriate backflow prevention device at the boundary for containment purposes, which has been manufactured in accordance with Australian Standard/New Zealand Standard 2845 Water supply Backflow prevention devices (AS/NZS 2845) Part 1:

Materials, design and performance requirements (**AS/NZS 2845.1**) and Part 3: Field testing and maintenance of testable devices (**AS/NZS 2845.3**). The installation of a backflow prevention device is necessary to ensure the public water supply system is protected from backflow or back siphonage of contaminants from connections to the supply.

4.3. The customer is responsible for the full cost of complying with this Policy.

5. Conditions of Installation

- **5.1.** All backflow prevention devices installed to comply with this Policy are the responsibility of the customer. This may include but is not limited to installation, maintenance and annual testing of the backflow prevention device.
- 5.2. Council will maintain a register of testable backflow prevention device installations, annual test records, and may conduct sample audits of installations to ensure ongoing compliance with AS/NZS 3500.1 in relation to the correct installation in accordance with Sections 4, 6, and 7, and the correct commissioning and testing procedure as set out in AS/NZS 2845.3.
- **5.3.** Existing customers connected to the water supply must install a backflow prevention device within three months of a notice to install issued by Council.
- 5.4. If Council determines that the backflow prevention device is unsatisfactory and issues a notice requiring the customer to repair, maintain, test, replace or install a backflow prevention device, the customer must comply with the notice given by the Plumbing Inspector within the time specified in the notice, in accordance with Section 14 of the *Plumbing and Drainage Act 2011*.
- 5.5. If the customer fails to install, repair, maintain, replace or test a backflow prevention device as required by a notice issued by Council, then 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 water supply system until such time as the customer has complied with the notice so to prevent contamination of the water supply. Council may also impose a fee or charge for administering non-compliance with the Policy, in accordance with Section 38 of the *Plumbing and Drainage Act 2011*.
- **5.6.** If the process or activity at a property changes, resulting in a reduced hazard or a higher hazard rating, the property owner must have a licensed and backflow-accredited plumber certify the change in hazard rating and then inform Council, who may conduct a site audit to verify the new hazard rating.
- **5.7.** The type of device installed shall be in accordance with the hazard rating of the processes conducted, or the water supply installations present on site.
- **5.8.** If the hazard rating varies due to multiple processes, the highest hazard rating shall be applied.
- **5.9.** Properties identified as having high or medium hazards must install a testable backflow prevention device.

- **5.10.** Where hazards are unknown for a commercial, industrial or a mixed development, or where access is restricted, the hazard rating will default to high, and the installation of a testable backflow prevention device will be required.
- **5.11.** Properties that have both drinking and non-drinking water supplies are required to install an appropriate level of backflow prevention on both supply systems. The installed device shall be the same on both the drinking and non-drinking services. These properties include mixed developments and areas serviced by a decentralised wastewater treatment system.
- 5.12. A backflow prevention device must be fitted to all water supplies entering the property, regardless of the supply type or metering arrangement, other than 20 mm and 25 mm connections providing drinking water to a single, low hazard residential dwelling. All devices must be installed on the outlet side of the master water meter(s) supplying the property to achieve site containment. In circumstances where there is no master water meter, the backflow prevention device shall be installed on the water supply where it enters the property boundary. There must be no connections bypassing the backflow prevention device or water meter.
- 5.13. A high hazard backflow prevention device must be installed at a property with a bidet seat installed that does not comply with the requirements of the PCA and AS/NZS 3500.1. A high hazard backflow prevention device must be installed at the water supply to the toilet bidet seat and at the water meter as a containment device. Bidets and douche hoses must only be connected to a drinking water supply. All douche hoses must have a high hazard backflow prevention device at the water connection and at the water meter as a containment device.
- **5.14.** An atmospheric backflow device shall not be used as a high hazard backflow prevention device on either a bidet seat or douche hose as this does not comply with Clause 4.6.3.3 (a) of AS/NZS 3500.1.
- **5.15.** In new installations where more than one toilet and/or douche hose are installed on a property, a dedicated, purple-coloured pipe may be used downstream of a zone backflow prevention device, to comply with Section 9.6 of AS/NZS 3500.1.
- **5.16.** Where a bidet seat or douche hose has been retroactively installed on a property, each individual bidet toilet seat or douche hose must have an individual high hazard backflow prevention device installed.
- **5.17.** Piping conveying water downstream of an individual or zone backflow prevention, installed for high or medium hazard protection, shall be clearly and permanently labelled at every outlet with a prohibition sign conforming to Clause 9.7.2 of AS/NZS 3500.1.

- **5.18.** A backflow prevention device must be installed so that the underside of the valve is a minimum of 300 mm above the finished surrounding surface, unless otherwise specified in the PCA or AS/NZS 3500.1 Section 4.
- **5.19.** Where a fire booster service is installed, the device must be installed so that the underside of the valve is a minimum of 750 mm above the surrounding surface.
- **5.20.** On a metered standpipe, the device shall be integrated into the design of the standpipe. Metered standpipes require a testable double check valve.
- **5.21.** On a separate hydrant and/or sprinkler fire service, the device shall be installed close to where the water service crosses the property boundary, upstream of any booster assembly on or offtake from the fire service.

6. Responsibilities

Compliance, monitoring and review

- **6.1.** All backflow prevention devices including Registered Break Tanks and Registered Air Gaps must be installed under the supervision of a licensed plumber.
- **6.2.** Only a licensed plumber with backflow prevention accreditation may commission and test the backflow prevention device, including Registered Break Tanks and Registered Air Gaps.
- **6.3.** Council, the plumbing regulator for the Central Coast local government area, reserves the right to take appropriate regulatory action against the licensed plumber for any incorrect installation that does not meet the requirements of the PCA, AS/NZS 3500.1 Sections 4, 6, and 7, AS/NZS 3500.4, and annual testing as defined in AS/NZS 2845.3.
- **6.4.** Customers are responsible for the installation, maintenance and annual testing of all backflow prevention devices on their property in accordance with AS/NZS 3500.1, AS/NZS 3500.4 and AS/NZS 2845.3.
- 6.5. Customers must ensure that the required documentation (Backflow Prevention Application, Inspection and Maintenance Report) and any prescribed fee is forwarded to the Council for installed backflow prevention devices.
- 6.6. The Backflow Prevention Device Inspection and Maintenance Report required on commissioning of the backflow prevention device must be completed by a licensed plumber with backflow accreditation and must accompany the backflow prevention device application.
- **6.7.** For low hazard connections that require a backflow prevention device, Council requires the registration of the backflow prevention device. Completion of the Backflow Prevention Device Inspection and Maintenance Report is not mandatory for low hazard connections.
- **6.8.** The device installation and commissioning test report must be registered with Council prior to service.

- 6.9. Customers are responsible for the provision of zone and individual backflow protection from hazards within their property, in accordance with AS/NZS 3500.1 Sections 4, 6, and 7, and the PCA, and have these backflow prevention devices tested annually in accordance with AS/NZS 2845.3.
- **6.10.** Suspected breaches or misuse of this policy are to be reported to the Chief Executive Officer. Alleged breaches of this Policy shall be dealt with by the processes outlined for breaches of the Code of Conduct, as detailed in the Code of Conduct and the Procedures for the Administration of the Code of Conduct.
- **6.11.** The following staff have identified roles under this Policy:

Team Leader Regulatory Compliance

6.11.1. The Team Leader Regulatory Compliance is responsible for the implementation and evaluation of the continuing effectiveness of the Policy in accordance with current legislation and government policies.

Section Manager Compliance Water Systems

6.11.2. The Section Manager Compliance Water Systems is responsible for the review and amendment of this Policy to ensure that it continues to achieve its purpose and remains current by reflecting changes in the operational or regulatory environment.

Unit Manager Headworks and Treatment

- 6.11.3. The Unit Manager Headworks and Treatment is responsible for the review and endorsement of any updates to this Policy.
- **6.12.** Significant risks to the integrity and safety of Council's water supply system identified in the implementation of this Policy should be reflected in the Enterprise Risk Management System.
- **6.13.** The Policy shall be reviewed and amended where required if any provisions are found to contradict any other Council Policies.

Reporting

6.14. No additional reporting is required.

Records management

6.15. Staff must maintain all records relevant to administering this protocol in accordance with Council's Information and Records Management Policy.

7. Policy Definitions

means the current version of the Australian Standard/New Zealand Standard for Plumbing and drainage. AS/NZS 3500.1 refers to Part 1: Water services of this standard.

| AS/NZS 3500.4 | means the current version of the Australian Standard/New Zealand Standard for Plumbing and drainage. AS/NZS 3500.4 refers to Part 4: Heated water services of this standard. |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AS/NZS 2845.1 | means the current version of the Australian Standard/New Zealand Standard for Water supply-Backflow prevention devices. AS/NZS 2845.1 refers to Part 1: Materials, design and performance requirements of this standard. |
| AS/NZS 2845.3 | means the current version of the Australian Standard/New Zealand Standard for Water supply-Backflow prevention devices. AS/NZS 2845.3 refers to Part 3: Field testing and maintenance of testable devices |
| Backflow | Flow in the direction contrary to the normal or intended direction of flow. The unintended flow of water from a potentially contaminated source into a drinking water supply system. |
| Backflow Prevention Device | means a mechanical device that will prevent the reverse flow of water from a potentially polluted source into the drinking water supply system. |
| Connections | means all service connections to a Council water main, including those from customers' premises or from standpipes. |
| Containment Protection | means the installation of a backflow prevention device on the water service at the property boundary, to prevent backflow from within the property entering the drinking water supply system. |
| Council | means Central Coast Council |
| Cross Connection | means any connection or arrangement between the drinking water supply system connected to the water main or any fixture, which may under certain conditions enable water unsuitable for drinking or other substances to enter the drinking water supply system. |
| Customer | means the owner/occupier of the property |
| Decentralised Wastewater Treatment System | means a privately-owned system for treatment and reuse or disposal of wastewater, including treated greywater. |

| Fire Drencher Sprinkler Systems | means heat-activated fire suppression systems, which spray water on the outside surface of a building or structure, to prevent the spread of fire from an adjacent building or structure. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Services | means services comprising water pipes, fire hydrants, fire hose reels, fittings and including water storage or pumping facilities, which are installed in and around a building or property solely for the purpose of fighting and extinguishing fires. Under certain conditions part of a fire sprinkler system may be included. |
| Hazard Ratings | means (as defined in AS/NZS 3500:1): |
| | 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 connection with the water supply system could endanger health. Low Hazard – any condition, device or practice that in connection with the drinking water supply system constitutes a nuisance but does not endanger health or cause injury. |
| Individual Protection | means installation of a backflow prevention device at the water connection point of piping to a fixture or appliance. |
| Mixed Development | means a property with both commercial and residential practices on site. |
| Licensed Plumber | means a plumber with a licence issued by NSW Fair Trading. |
| Licensed Plumber with means a licensed plumber who holds accreditation Registered Training Organisation for backflow prevention commissioning and certification. | |
| PCA | means the Plumbing Code of Australia, Volume Three of the National Construction Code that covers the design, construction and maintenance of plumbing and drainage systems in new and existing buildings. |
| Zone Protection | means installation of a backflow prevention device at the connection point of specified sections of a plumbing system within a building or facility. |

8. Policy Administration

| Business Group | Water and Sewer | |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Responsible Officer | Unit Manager Headworks and Treatment | |
| Associated Procedure (if any, reference document(s) number(s)) | Create New Backflow Prevention Device Licence (D13966674) Process Annual Backflow Prevention Device Reports (D13966687) | |
| | Process Zone & Individual Backflow Prevention Device Reports (D15673917) | |
| | Process Non-Complying Backflow Prevention Device Reports (D15673912) | |
| | Process Failed Backflow Prevention Device Reports (D13966685) | |
| | ■ Backflow Device – Deleting Licence (D13978230) | |
| | Backflow Device – Moving a Licence to the Current Property (D13966679) | |
| | Backflow Device – How to Locate Pathway Water Meter Details Using GeoView (D16467271) | |
| | Backflow Device - Issue Backflow Prevention Device Renewal Notices (D13966692) | |
| | Backflow Device - Issue Backflow Prevention Device Reminder Notices (D13966688) | |
| | Backflow Device - Issue Backflow Prevention Device Exceptions (D13966683) | |
| Policy Review Date | Four years from date of adoption unless legislated otherwise | |
| File Number / Document Number | D16322973 | |
| Relevant Legislation (reference specific sections) | This Policy supports Council's compliance with the following legislation: | |
| | Local Government Act 1993 | |
| | ■ Local Government Regulation 2021 | |
| | Public Health Act 2010 | |
| | Public Health Regulation 2012 | |

| | Plumbing and Drainage Act 2011 | |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | Plumbing and Drainage Regulation 2017 | |
| Link to Community Strategic | Theme 4: Responsible | |
| Plan | Goal G: Good governance and great partnerships | |
| | R-G1: Build strong relationships and ensure our partners and community share the responsibilities and benefits of putting plans into practice. | |
| Related Policies / Protocols / Procedures / Documents | AS/NZS 2845.1 Water Supply – Backflow prevention devices, Part 1: Materials, design and performance | |
| (reference document numbers) | <u>requirements</u> | |
| | AS/NZS 2845.3 Water Supply – Backflow prevention devices, Part 3: Field testing and maintenance of testable devices | |
| | AS/NZS 3500.1 Plumbing and drainage Part 1: Water services | |
| | AS/NZS 3500.4 Plumbing and drainage Part 4: Heated water services | |
| | • <u>Code of Conduct</u> (D16000605) | |
| | <u>Drinking Water Quality Policy</u> (D16236390) | |
| | Information and Records Management Policy (D14025241) | |
| | Plumbing Code of Australia (Volume 3 of the National Construction Code) | |

9. Policy Authorisations

| No. | Authorised Function | Authorised Business Unit / Role(s) |
|-------|-----------------------------------------------------------------------------------------------------|----------------------------------------------|
| FT001 | Monitor compliance with the <i>Plumbing and Drainage Act</i> 2011 in accordance with section 19(a). | Senior Plumbing Inspector Plumbing Inspector |
| FT002 | Ensure any plumbing and drainage work carried out does not threaten public health and safety in | Senior Plumbing Inspector Plumbing Inspector |

| | accordance with section 19(b) of the <i>Plumbing and</i> Drainage Act 2011. | |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| FT003 | Undertake any other functions conferred or imposed on the Plumbing and Drainage Regulator by the <i>Plumbing and Drainage</i> Act 2011 other than: - receiving notices of work and other documentation required, - authorising fittings for use in plumbing and drainage work, and - initiating criminal or other proceedings as provided for in Part 5 of the <i>Plumbing and Drainage Act 2011</i> . | Senior Plumbing Inspector Plumbing Inspector |

10. Policy History

| Revision | Date Approved / Authority | Description Of Changes |
|----------|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 26 June 2020 | New policy adopted (replacement of the Backflow Prevention Containment Policy of the former Gosford City Council) |
| 2 | 22 July 2025 Minute Number 723/25 (adoption) | Periodic review, provide additional details regarding responsibility of property owners for installing and maintaining individual and zone backflow prevention devices, removal of reference to <i>Water Management Act 2000</i> , updated template. |