

Backflow Prevention and Cross Connection Control Policy - Containment Only

1 Purpose

City of Coffs Harbour (City) is committed to preventing the possibility of **backflow** of contaminated substances into City's drinking water supply system. Backflow is the reverse flow of waters or other liquids from a potentially polluted source into the town's water supply, which could result in sickness and in some cases death. Backflow is caused by several conditions:

- a) **Backsiphonage** – is where the pressure in the reticulation system becomes less than atmospheric, this causes water from connected properties to flow backwards into the town's supply e.g. water main break
- b) **Backpressure** – is when the consumer's water pressure is greater than the pressure in the town's water supply e.g. consumer water pump
- c) **Cross-Connection** – is a direct or indirect physical connection of a potable water supply to a line that is non-potable e.g., town water supply to a non-potable bore.

2 Policy

The City is committed to providing safe drinking water to consumer properties, which includes protecting the drinking water supply system from contamination or pollution by backflow. All new and existing connections to the City's drinking water supply must comply with applicable backflow legislation, regulations, standards and this Policy. All existing properties must comply with the containment backflow requirements of AS 3500.1 and NCC - Volume Three - Plumbing Code of Australia.

The objectives of the backflow prevention and cross connection control policy are to:

- a) Separate and protect the potable water supply from real or potential hazards by the installation of backflow devices
- b) Protect public health by providing a secure and safe water supply
- c) Manage cross connection and reduce the possibility of backflow
- d) Contain any real or potential hazard within the boundaries of the consumer's property
- e) Ensure the integrity and safety of Councils water supply
- f) Ensure that non potable water from each end user does not infiltrate the Council water supply

2.1 Property Owner Responsibility

Installation and maintenance of adequate backflow protection devices at the property boundary is the responsibility of each property owner.

City of Coffs Harbour will provide integral LOW hazard rated backflow prevention devices in all new 20mm and 25mm water meters. For any 20mm or 25mm service which requires medium or high hazard protection, the property owner must ensure the correct backflow prevention device is installed and registered with the City.

For all services larger than 25mm, the property owner must provide suitable, ie low, medium or high hazard rated backflow protection device after the water meter at the property boundary and register testable devices with the City.

Installation and maintenance of any internal individual and zone protection backflow protection devices are the responsibility of the property owner.

2.2 Hazard Ratings

- a) **High Hazard** - Any condition, device or practice within the water supply system and its operation, which has the potential to cause death.
- b) **Medium Hazard** - Any condition, device or practice within the water supply system and its operation, which could endanger health.
- c) **Low Hazard** - Any condition, device or practice within the water supply system and its operation, which would constitute a nuisance but not endanger health.

2.3 Alternative Water Supply

Where an alternative water supply is reticulated on a property there is potential for cross connection and a Reduced Pressure Zone Device (RPZD) backflow prevention device must be installed at the water meter. This may not apply to rain water tanks: refer to City's Urban Rain Water Tank Policy.

Alternative water supplies (other than rain water) include:

- a) Treated grey water reuse
- b) Reclaimed wastewater
- c) Septic treatment/reuse systems

2.4 Requirements for Testable Devices

- a) All containment testable backflow devices must be registered with City and tested on installation by an accredited person/tester.
- b) All containment testable devices must be tested on an annual basis and results forwarded to City in the format that Council chooses.

2.5 City of Coffs Harbour Responsibility

The City will maintain a database of containment testable registered backflow protection devices to ensure property owners are compliant with installation and maintenance requirements.

2.6 City of Coffs Harbour Rights

- a) The City has the right as the relevant authority to make any property owner install supplementary containment, zone or individual devices to guarantee that there will not be contamination of the town's water supply.
- b) The City has the right to recoup any costs that it incurs in the process of ensuring properties are compliant with the relevant codes and practises.

3 Definitions

Backflow prevention device: means an air gap, break tank or mechanical device that is designed to prevent the unplanned reversal of flow of water or contaminants into the City of Coffs Harbour's water supply.

Potable Water: Water that is safe for human consumption

Containment protection: Backflow protection installed at the property boundary water meter to protect the City's water supply.

Zone protection: Zone protection provided at the connection to specific sections of a water supply system within a building or a facility.

Individual protection: Individual protection provided at individual fixtures, appliances or apparatus

Accredited person/tester: A licenced plumber who holds accreditation from a registered training organisation for backflow prevention device commission and certification.

RPZD – Reduced Pressure Zone Device

4 Key Responsibilities

Position	Directorate	Responsibility
Mayor	Council	To lead Councillors in their understanding of, and compliance with, this policy and guidelines.
General Manager	Executive	To lead staff (either directly or through delegated authority) in their understanding of, and compliance with, this policy and guidelines.
Directors	All Directorates	To communicate, implement and comply with this policy and related guidelines.
City Leaders	All Directorates	To plan, action, communicate, implement and comply with this policy and related guidelines as it impacts your areas of responsibility.
All City workers	City	To comply with this policy and related guidelines.

5 References

- Local Government Act 1993
- Local Government (General) Regulation 2021
- Plumbing & Drainage Act 2011
- NCC - Volume Three - Plumbing Code of Australia
- Australian Standard AS3500.1 – Water Services
- Australian Standard AS2845 - Backflow Prevention Devices
- CHCC Water Meter / Service Installation policy

6 Details of Approval and revision

- **Approval date:** 9/03/2023
- **Responsible Group:** Water and Waste Services
- **Responsible Section:** Water and Sewer
- **Superseded policies/procedures:**
- **Next review date:** 28/08/2025

Table of amendments

Amendment	Authoriser	Approval ref	Date
The following amendments were made: - Added example of backpressure (Section 1.(b)) - Changed sentence – installing integral LOW hazard rated backflow prevention devices in all new 20 & 25mm water meters. (Section 2) - Added definitions for Accredited person/tester, Individual/zone and Containment protection (Section 3)	Council	2023/30	09/03/23