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TECHNICAL STANDARD

Central Tablelands Water

Backflow Prevention Technical Standard

DOCUMENT CONTROL

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1	Oct 2026	New document	EMOTS	Council	

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PURPOSE

This Technical Standard establishes the minimum technical requirements for assessment, installation, registration, commissioning, testing and maintenance of backflow prevention devices connected to the Central Tablelands Water drinking water supply network.

The Standard supports the implementation of CTW-PR034 Drinking Water Backflow Prevention Policy.

SCOPE

This Policy applies to:

- Residential services
- Commercial services
- Industrial services
- Rural services
- Fire services
- Temporary services
- Standpipes
- Tanker filling points
- Alternative water supplies
- Irrigation systems
- Future developments

1. HAZARD CLASSIFICATION

1.1 Low Hazard

Definition:
A condition that would not endanger health but may adversely affect the taste, colour, odour or appearance of water.

Examples:

Activity
Single dwelling
Standard residential lot
Domestic garden irrigation
Small rural dwelling without livestock water interconnection

Minimum Device

- Dual check valve
- Integral meter protection accepted by CTW

1.2 Medium Hazard

Definition:
A condition that could endanger health.

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Examples:

Activity
Hotel
Club
School
Childcare Centre
Food Premises
Car Wash
Irrigation System
Commercial Workshop

Minimum Device

- Testable Double Check Valve Assembly (DCVA)

1.3 High Hazard

Definition:
A condition that may cause serious injury or death.

Examples:

Activity
Chemical storage
Chemical dosing
Water carting
Wastewater treatment
Abattoir
Hospital
Mortuary
Spray contractor filling point
Livestock water reticulation
Industrial process water

Minimum Device

- RPZD
- Registered Air Gap
- Registered Break Tank

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2. PROPERTY CLASSIFICATION MATRIX

Land Use	Hazard Category	Device
Dwelling	Low	Dual Check
Duplex	Low	Dual Check
Residential Strata	Medium	DCVA
School	Medium	DCVA
Hotel	Medium	DCVA
Caravan Park	Medium	DCVA
Fire Service	Medium	DCVA Detector
Irrigation from Dam	High	RPZD
Water Carter	High	RPZD
Livestock Facility	High	RPZD
Wastewater Plant	High	RPZD

3. INSTALLATION REQUIREMENTS

Location

Containment devices must be:

- Immediately downstream of the CTW water meter.
- As close as practical to the property boundary.
- Accessible at all times.
- Above ground unless otherwise approved.

Containment devices must not:

- Be buried.
- Be submerged.
- Be installed in flooded pits.
- Be obstructed by landscaping.

Clearance Requirements

Minimum clearances:

Location	Clearance
Side	150 mm
Rear	150 mm
Top	300 mm
Test Cock Side	300 mm

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4. FIRE SERVICES

Separate fire service connections require:

- Detector Double Check Valve Assembly (DDCVA), or
- Alternative approved arrangement.

Separate fire service connections shall be protected in accordance with CTW requirements and the assessed hazard rating. Detector Double Check Valve Assemblies (DDCVA) will normally be required unless an alternative arrangement is approved by CTW.
Fire system design remains the responsibility of the hydraulic designer.

5. ALTERNATIVE WATER SUPPLIES

Alternative supplies include:

- Rainwater
- Bore water
- Dam water
- Recycled water
- Greywater

Direct cross-connections with potable water are prohibited.
Approved top-up systems must comply with:

- Plumbing Code of Australia
- AS/NZS 3500
- CTW requirements

6. CONSTRUCTION SERVICES

Builders' water supplies must:

- Use approved standpipe arrangements.
- Include containment protection.
- Be inspected by CTW prior to use.

7. WATER CARTING FILL POINTS

All tanker filling points are deemed:
HIGH HAZARD
Required device:

- RPZD

Additional requirements:

- Lockable outlet.
- Air gap on filling arrangement.
- Annual testing.

8. RURAL WATER SERVICES

Properties with:

- Livestock watering systems
- Spray units
- Chemical mixing points
- Fertigation systems

shall be classified as a minimum:

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HIGH HAZARD

Unless otherwise approved by CTW.

This will be particularly relevant in the CTW area because of agricultural and stock watering activities.

9. REGISTRATION REQUIREMENTS

Testable devices must be registered with CTW.

Register information:

- Property address
- Owner
- Meter number
- Device type
- Device serial number
- Hazard classification
- Installation date
- Test history

10. COMMISSIONING

Before being placed into service:

- Device installed.
- Device tested.
- Test certificate submitted.
- Device added to CTW register.

11. TESTING REQUIREMENTS

Device	Testing Frequency
DCVA	Annually
RPZD	Annually
Break Tank	Annually
Air Gap	During inspection program

Testing must be undertaken by an accredited backflow tester.

12. FAILED DEVICES

Where a device fails:

1. Owner notified.
2. Device repaired or replaced.
3. Retested.
4. Certificate submitted.

Where an immediate public health risk exists, CTW may restrict or disconnect the service in accordance with the Policy.

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13. INSPECTION PROGRAM

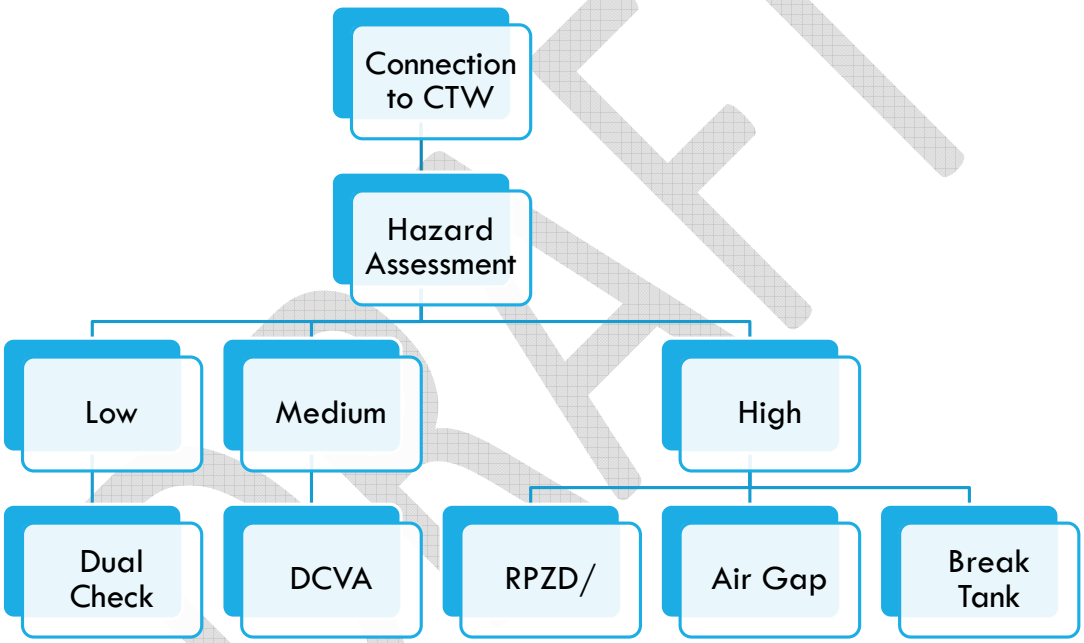
CTW may undertake:

- Site audits.
- Device audits.
- Registration audits.
- Property inspections.

Priority should be given to:

- High hazard sites.
- Water carters.
- Industrial premises.
- Livestock facilities.
- RPZD installations.

Device Selection Flowchart



TECHNICAL STANDARD REVIEW

This Technical Standard may be amended by the Executive Manager Operations & Technical Services without requiring Council approval, provided any amendment remains consistent with CTW-PR034 Drinking Water Backflow Prevention Policy.