

Document Owner: Manager Customer Planning

WWA-PM.002.27 Water Network PRV Testing and Maintenance

Scope/Purpose: Network Pressure Reducing Valves (PRVs) are an important protection device in the water networks. They are used to control pressure in a distribution zone and if not set correctly can lead to increases in burst rates and or under pressurising of supply areas which can lead to low local pressures and risks to the water supply during leaks and bursts and loss of firefighting capacity.

Health & Safety and Operational Information

Hazard Indicators



Personal Protection



Health and Safety Information

- Health and Safety documentation.
- Generic Traffic Management Plans or site-specific Traffic Management plan.
- Confined Space Entry

Operation's & Maintenance Documentation

- Corridor Access Requests (CAR) and WIP Permits (site specific or generic/global)
- Service plans (B4uDig)
- Design drawings
- Site plans
- Notification Calling Cards

Customer Information (Confidential)

- Vulnerable customers (DHB supplied list)
- Priority customers (WWL)

Priority Customer Categories

- Schools and Childcare
- Commercial premises
- Hospitals
- Retirement Homes/Villages
- Correction Facilities
- Military Installations
- Oil and Gas Refinery

Emergency Procedure / Escalation

- Make "Site Safe" and isolate risks to people or property with resources at hand
- In event of service strike to utility/energy source (e.g. fuel, Gas, Power, Water etc.) report immediately to team leader

Additional Documentation

- Specialised equipment needed.
- Fulton Hogan Work Instruction for Disinfection of Water Systems

Escalate if extra resources required or problems occur!

- Escalate to Team Leader and inform of the issues faced and/or expected resources required if necessary.

Required Skills, Competencies (Qualifications and/or Certifications)

Competent persons only NZ Certificate in Infrastructure Works Level 3 or higher (or similar) with Strand Water.

Document Owner: Manager Customer Planning

WWA-PM.002.27 Water Network PRV Testing and Maintenance

Standard Operating Procedure

Required Equipment

Equipment and Information	Details
Fully Equipped Vehicle	Ensure vehicle, plant, equipment and materials appropriate to the day's work schedule is available.
Specialist Equipment	PRV test kit.

Prepare to do the work

Action	Action Details
Pre Start Process	Complete the Daily Pre Start for Planned Maintenance..
Compliance	Traffic Management Plan - Where required. TMP to be in place prior to work starting. TMP to be accessible on site.
Customer Notification	N/A unless customers are going to be without water. If customers are going to be without water use appropriate SOP.

Perform the work

Action	Trade	Action Details
Compliance	Serviceperson	Implement TMP if needed.
Inspection Record	Serviceperson	Locate and inspect the chamber and surrounds and clear to ensure free from vegetation and have good access. Record flowmeter details and inlet/outlet pressure gauge reading (kPa) (if fitted) Complete addition details re flow and condition on PRV WoF form. Check PRV chamber hatches and covers for security and functionality. Inspect PRV chamber pipework for leaks, water flooding and corrosion. Check vermin and insect bait stations and refill as necessary.
Maintenance	Serviceperson	Check any strainers or filters Exercise pressure relief valve and return to normal setting Conduct Shut Pilot Test
	Serviceperson	Visually inspect Telemetry cabinet and aerial equipment.
Close Out	Serviceperson	Complete details in Inspection and Test Form at the link below: (https://waterworkspace.fhtools.com/contract/HDC-3WOM-2019/Operations/ layouts/15/WopiFrame2.aspx?sourcedoc={53635B3E-E0C8-4C87-90C9-1C7D5D070A1D}&file=PW_Retic_007_FORM.docx&action=default) and action as required. If you have any concerns with PRV operation ensure additional work is scheduled in work management system. Specialist Type 2 testing maybe required by specialist subcontractor.