

Document Owner: Manager Customer Planning

Investigate Potable Water Quality Problem - Maintenance Procedure

Procedures for responding to a customer call related to the quality of the potable water supplied at the service connection.

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.
 - Approved methodology for collection and transportation of collected samples

- Operation’s & Maintenance Documentation**
- Corridor Access Requests (CAR) and WIP Permits (site specific or generic/global)
 - Service plans (B4uDig)
 - Site plans
 - Notification Calling Cards
 - Sampling procedure documents

- Customer Information (Confidential)**
- Vulnerable customers (DHB supplied list)
 - Priority customers (WWL)

- Priority Customer Categories**
- Hospitals
 - Aged care facilities (Retirement Homes/Villages)
 - Medical centres / laboratories
 - Schools and Childcare
 - Commercial premises
 - Food premises
 - Food and beverage processing plants
 - Cafes and bars
 - Correction Facilities
 - Military Installations
 - Oil and Gas Refinery

Emergency Procedure / Escalation

Additional Documentation

- Emergency**
- Make “Site Safe” and isolate risks to people or property with resources at hand
 - In event of major contamination, isolate the source and report immediately to team leader

- 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

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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
Equipment	Potable Water Field Test / Sampling Kit Sample bottles and sample bottle labels, Permanent Ink Pen Sterilisation equipment - alcohol and 1% sodium hypochlorite Hypochlorite solution, gas burner, swabs and wipes
Calling Cards	Customer Calling Card / Notification letter drop cards
Vulnerable & Priority Lists (Confidential)	Ensure you have access to the Vulnerable & Priority Lists

Prepare to do the work

Action	Action Details
Pre Start Process	Complete the Daily Pre Start - Planning Reactive Maintenance
Own the problem	The issue could be localised as in taste, colour, turbidity or grit etc More serious is bacterial contamination and to what extent. Are people in a household affected or is the issue more widespread. Try to know the problem beforehand, and prepare accordingly.
Compliance	Traffic Management Plan - Where required, . TMP to be accessible on site especially if flushing hydrants or operating valves, scouring rider mains etc
Site plans	Location plans for the service connection and associated supporting assets

Perform the work

Action	Trade	Action Details
Maintenance	Serviceperson	Undertake all tasks required in the Pre-Start - Planning for Reactive Maintenance.
Inspection	Serviceperson	Ensure that toby connection is functional and fully open.
Private Land	Serviceperson	Attempt to contact customer prior to undertaking investigation. If contactable inform of situation and seek access approval prior to commencing works
Private Land	Serviceperson	If accessing private land to undertake investigations ensure you are safe and that, there are no dangerous dogs / animals or other dangers on entering the property. Avoid entering a private dwelling where it is practical to remain outside. If you have had to access the land without permission, please ensure you leave a notification calling card to explain the access reason.
Sampling	Serviceperson	Remove any attachments from the external hose tap or internal tap that may cause splashing. Use a clean cloth or paper to clean the outlet. Remove any dirt.
Sampling	Serviceperson	Turn on the tap to maximum flow and allow water to run for 1-2 minutes. Sufficient water (at least 20 litres) should have passed through the tap. Turn tap off.
Sampling	Serviceperson	For metal taps only, sterilise the using the flame methodology where practicable. If flaming the tap is impractical, disinfect the tap by swabbing it (inside and outside) with a 1 percent sodium hypochlorite solution. Leave to stand for two to three minutes to disinfect the tap
Sampling	Serviceperson	Prepare the sample bottle so that it is ready to receive the sample. Complete as much of the labelling tasks as practicable prior to undertaking sampling. Carefully turn on the tap to a medium flow rate and allow the water to flow then reduce the flow rate. DO NOT change the flowrate while filling the bottle, as deposits may be dislodged.

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Action	Trade	Action Details
		Once sample taken, seal the bottle and complete mark-up labelling correctly then store in cooler container for shipping to laboratory for testing within 24 hours if required. Whatever is being sampled for, the act of collection must be done with utmost care to reduce the possibility of contaminating the sample(s).
Record	Serviceperson	Collect water sample for free available chlorine (FAC) from external tap. Take after 2 or 3 minutes of flushing and clear water is flowing. Record the test results in the work order meters section on the iPad
Record	Serviceperson	The following test(s) may be undertaken in the field and the results recorded on the Water Quality Sampling Survey Form. Field test to occur only post instruction from supervisor. <ul style="list-style-type: none"> • Turbidity • pH • E.coli
Test	Serviceperson	If it is suspected that the issue could be affecting multiple properties, contact Supervisor and seek approval to undertake sampling of neighbouring properties and hydrants to ascertain whether there may be a network problem.
Maintenance	Serviceperson	Undertake appropriate SOP in respect to the Network issue identified i.e. Mains and Connections Pipe Repair SOP etc.
Dispatch of samples	Serviceperson	Ensure that all samples are either dispatched or delivered for testing prior to completion of all work on the day the testing has occurred. All samples must be stored in the provided storage container at the correct temperature.
Closure	Serviceperson	Carry out work order closure procedures as per Reactive Maintenance – Generic Reactive Maintenance Procedures

Follow Up Work(s)

Action	Trade	Action Details
Record	Serviceperson	On receipt of the laboratory tests update the Water Quality Sampling Survey Form(s) that have been completed with the test results.
Report	Serviceperson	If laboratory results indicate, an issue with the supply network, which requires further intervention, on discovery, immediately notify your supervisor of the issue to enable the decisions on further actions to be taken.
Comm's	Serviceperson	Update customer of the results of the laboratory testing which has occurred. This may occur via the Hub customer centre.
Contact Card	Serviceperson	Customer Calling Card / Notification letter drop cards. Explain activities undertaken in their absence and the results of any field test undertaken. Provide a date when expected results of Lab testing will be made available