

Describing a water distribution system

Public Health Act 2005 Section 61D(a)

Introduction

This document outlines the information that is being used to assess compliance with Section 61D(a) of the *Public Health Act 2005* - description of the prescribed facility's water distribution system. It is based on criteria that have been identified as being required to establish the scope of the water risk management plan as well as meeting the intent of describing a water distribution system to support a robust assessment of risks.

There are many benefits associated with understanding the water distribution system. It supports the identification of hazards and failure points, improves risk assessment, supports better operational decisions, strengthens investment and planning and improves emergency preparedness.

A water risk management plan (WRMP) must contain specific information which can be found on Queensland Health's supporting webpages [Water risk management plans](#).

Criteria for describing a water distribution system

The following information is not an exhaustive list as water uses and plumbing components will differ from building to building but WRMPs should include this information as a minimum.

Criteria	Prescribed facility as a tenant in a multipurpose premises*	Prescribed facility in purpose-built premises++
Facility characteristics	<ul style="list-style-type: none">Describe the services provided by the facilityBuilding age/pipe age (if known or estimated)Bed capacity and number of rooms covered by the WRMPDescribe all water uses	<ul style="list-style-type: none">Describe the services provided by the facilityBuilding age/pipe age (if known or estimated)Number of buildings on site campusNumber of buildings covered by WRMPBed capacity for each building/siteDescribe all water usesIdentify water uses covered by the WRMPIdentify water uses not covered by the WRMP

<p>Water source details</p>	<ul style="list-style-type: none"> • Identify water supply arrangements (e.g., mains or private such as rainwater) • Identify water service provider • Water supply disinfection details, if known • Describe the location of incoming water supply to prescribed facility – e.g., first outlet that represents water entering the prescribed facility • Incoming water quality at boundary to prescribed facility e.g., water temperature at point of entry, disinfection residual and <i>Legionella</i> concentration – information must be less than 12 months old • Emergency supply arrangements if main or building water supply is interrupted or contaminated 	<ul style="list-style-type: none"> • Identify water supply arrangements (e.g., mains or private such as rainwater) • Identify water service provider • Water supply disinfection details (e.g. chlorination or chloramination) • Identify other water sources used by the facility (rainwater, sterile water, bore water etc.) • Incoming water quality at boundary to prescribed facility e.g., water temperature, disinfection residual, turbidity, pH, conductivity – information must be less than 12 months old <ul style="list-style-type: none"> - Information should represent seasonal variation – this can be based on historical monitoring information sufficient to show seasonal trends in water quality - Emergency supply arrangements if water supply is interrupted or contaminated
<p>Premises plumbing components</p>	<ul style="list-style-type: none"> • Identify system components and outlets within the facility e.g., specialist medical equipment, water features, water chillers/coolers/ice machines, taps, showers, thermostatic mixing valves (TMVs), etc. • Describe any onsite water treatment processes performed by the prescribed facility • Specific details about pipes, insulation, water heating, backflow valves, boosters, fire suppression systems etc. are not required as these are not required as these are considered beyond the control of the facility as a tenant in a multipurpose building unless this is part of the leasing arrangements 	<ul style="list-style-type: none"> • Describe water pipe e.g., materials, pipe insulation • Describe all onsite storage tanks where relevant • Describe onsite water treatment e.g., addition of softener, supplementary water disinfection, thermal treatment, UV etc. • Describe cold-water circulation system and circulating temperature • Describe water heating e.g., boiler, calorifiers, instantaneous systems • Describe heated water circulation system • Describe the number, size, and location of all relevant system components and outlets e.g., water storage tanks, TMVs, sensor taps, flow restricting devices, tap aerators, medical equipment that uses water, hydrotherapy pools, spas, dental chairs, ice machines, water coolers etc. Totals of

		<p>these components is sufficient. Links to documents where information can be found is acceptable – provided the information is included in the referenced documents</p> <ul style="list-style-type: none"> • Inclusion of air conditioning cooling towers under the scope of a WRMP is optional
<p>Water system flow diagram</p>	<ul style="list-style-type: none"> • A simple diagram should detail water flow (including flow direction) from entry into and around the prescribed facility • The diagram should reflect the information provided in the above sections 	<ul style="list-style-type: none"> • Multiple diagrams will be required to illustrate: <ul style="list-style-type: none"> - Site campus – identifying all buildings subject to the plan and their relationship with each other, location of incoming mains, direction of water flow around the site, location of back flow valves etc. - Individual buildings – water flow within each building for cold and hot water, identification of water treatment processes, identification of system components per level e.g. number of mixer taps, shower mixers, TMVs, specialist equipment • Does not have to be plumbing/hydraulic plans • The diagram should reflect the information provided in the above sections

*A multipurpose premises means a building or other structure which supports mixed use activities e.g. shopping centres or medical centres where a prescribed facility is a tenant of a building and is not directly responsible for the water supply or its related infrastructure.

++Purpose built facility means a building/s that has been specifically designed and built for a particular use such as health care service delivery.