

Drinking water quality information guide

Water Supply (Safety and Reliability) Act 2008

Purpose

New water legislation, the *Water Supply (Safety and Reliability) Act 2008* (the Act), which deals with matters including drinking water quality management commenced on 1 July 2008. The Act is administered by the chief executive (Director-General) of the Department of Environment and Resource Management. The chief executive has delegated certain powers under the Act to the Office of the Water Supply Regulator (the regulator).

This document provides information on the new drinking water quality regulatory requirements which apply to drinking water service providers.

An overview of the legislation for drinking water quality management

The provisions dealing with drinking water aim to protect public health by requiring drinking water service providers to:

- undertake monitoring and reporting on drinking water quality
- develop and implement a Drinking Water Quality Management Plan (DWQMP).

There are **no exemptions** from the new obligations for any drinking water service provider.

At the same time the Act was established, amendments were also made to the *Public Health Act 2005* to include provisions relating to drinking water quality and safety.

Am I a drinking water service provider?

Who is a drinking water service provider?

Your organisation is currently registered as a service provider under the Act (previously registered under the *Water Act 2000*). Under the Act, your organisation will also be a drinking water service provider if you provide a drinking water service.

A drinking water service provider—

- owns infrastructure for the treatment or transmission or reticulation of water for supply as drinking water. For example, it includes the treatment of water by a water treatment plant for supply as drinking water or the supply and distribution of drinking water to customers; or
- owns a water storage **and** the water in the storage contains recycled water intended to be used to augment a drinking water supply.

Drinking water is water for human consumption, intended primarily as water for drinking, whether or not the water is used for other purposes. It does **not** include:

- water taken or supplied for **domestic purposes** under the *Water Act 2000* (falls under what is sometimes referred to as ‘stock and domestic’ water). Domestic purposes include irrigating a garden that has an area of not more than 0.25 hectares and is cultivated for domestic use and not for the sale, barter or exchange of goods produced in the garden; and
- water that is **food** as defined under the *Food Act 2006*. This is water sold for human consumption (e.g. bottled water) or used by a food business that involves the handling of food intended for sale or the sale of food. It also includes water carried in bulk in a vehicle and intended for human consumption regardless of the source of the water.

Who is not a drinking water service provider?

A drinking water service provider **does not include**:

- the owner of infrastructure where the service is used only by the owner of the infrastructure or the owner’s guests or employees. For example, an island resort which supplies only its employees and guests with drinking water is not a drinking water service provider

or

- if the owner of the infrastructure is a body corporate for a community titles scheme under the *Body Corporate and Community Management Act 1997* (BCCM Act) - the occupants of lots in the scheme. For example, if an eco-village established as a body corporate under the BCCM Act is not connected to the town drinking water reticulation system, and supplies its own drinking water to the occupants of the eco-village only, it would not be a drinking water service provider.

What if I am not a drinking water service provider?

On October 9 2008, the regulator wrote to all water service providers asking them to indicate whether or not they were a drinking water service provider (via ‘Are you a drinking water service provider?’ form). If you think you are not a drinking water service provider and did not complete the form and have subsequently been issued with a notice for monitoring and reporting, please fill out ‘Are you a drinking water service provider?’ form and return it to the regulator as a matter of urgency.

What are the new requirements under the *Public Health Act 2005*?

As part of the legislative changes made to regulate drinking water, amendments were made to the *Public Health Act 2005* and the *Public Health Regulation 2005* (the Regulation). Queensland Health has:

- set specific standards for drinking water quality in the Regulation; and
- the power to respond when drinking water supplied by a drinking water service provider may present a risk to public health or be considered unsafe. For example, Queensland Health can require action to be taken to protect public health by the issue of a public health order or an improvement notice to a drinking water service provider.

Under section 57E of the Public Health Act, it is an **offence** for a drinking water service provider **to supply drinking water that the provider knows, or reasonably ought to know, is unsafe**. The maximum penalty for the offence is **3000 penalty units or two years imprisonment**.

Note that all incidents must be reported directly to the regulator, not Queensland Health. The regulator may seek advice from Queensland Health.

What are the new requirements under the *Water Supply (Safety and Reliability) Act 2008*?

The new requirements are:

- a drinking water service provider must have an **approved DWQMP** unless transitional phases apply
- during the transitional phase, a drinking water service provider is required to **monitor and report on drinking water quality in accordance with a notice issued by the regulator**. The notice continues to apply until the provider has an approved DWQMP.

The implementation of these requirements will be undertaken in two stages.

Stage 1: Monitoring and reporting on drinking water quality under a notice issued by the regulator

What do I need to do now?

Each existing drinking water service provider has been issued with a notice from the regulator about monitoring and reporting. You need to undertake monitoring and reporting of your drinking water service in accordance with that notice.

All new drinking water service providers (i.e. those

becoming a drinking water service provider after 1 July 2008) will also be issued with a notice from the regulator to undertake monitoring and reporting until they have an approved DWQMP.

What do I need to monitor for?

The notice specifies the monitoring requirements which apply from 2 January 2009 which are to:

- undertake monitoring for water quality standards as set by Queensland Health in the Regulation.
- note Queensland Health has established standards for fluoride where drinking water is fluoridated; and for *Escherichia coli* (*E. coli*) in the **reticulation system** for the drinking water service. Frequency of sampling for *E. coli* based on the size of the population served by that service (refer to the '*Escherichia coli* (*E. coli*) monitoring guidance note' in this information package for more information).
- continue with your current monitoring program for other parameters (e.g. if a provider is monitoring for other parameters on a weekly or other basis they must continue with that monitoring).

If significant health related issues with water quality are identified, the regulator may **issue a further notice** to the provider requiring monitoring of a specific parameter at a designated sampling frequency.

A drinking water service provider must comply with a notice issued by the regulator unless they have a reasonable excuse.

The information you collect during this monitoring period will be useful to you when developing your DWQMP. You must continue monitoring in accordance with the notice until you have an approved DWQMP. Monitoring then forms a component of the DWQMP.

What reporting do I need to do?

As a drinking water service provider, you will need to give the regulator the following reports:

- current drinking water quality monitoring program(s) (if any)
- routine reports:
 - summary reports of monitoring data (including incidents) on a quarterly basis
- incident reports:
 - immediately – all instances where you do not meet the health related drinking water quality criteria (i.e. detection of *E. coli*, pathogen or other health related guideline values specified in the *Australian Drinking Water Guidelines* and detection of fluoride and radiological chemicals above a specified value)
 - within 24 hours – if a parameter is found for which there is no guideline value in the *Australian Drinking Water Guidelines*
 - as soon as practicable – for an event or series of events likely to affect drinking water quality or that

will cause difficulty in the ability to adequately treat or provide drinking water (e.g. flood or bushfire).

“Immediately” means reported by telephone within three hours, followed by a written confirmation by fax or email within 24 hours. Forms are provided by the regulator for these reports.

Note that **all incident reports must be made directly to the regulator**, not Queensland Health. The regulator may seek advice from Queensland Health.

What do I do if I think I may have difficulties meeting the *E. coli* monitoring requirements?

If you think you may have significant operational issues in meeting the monitoring requirements for *E. coli* specified in the Regulation from 2 January 2009 onwards, you need to complete the ‘*Drinking water quality: potential issue with meeting monitoring requirements for Escherichia coli (E. coli)*’ form to advise the regulator. The information supplied will be used by the regulator to assess your situation, and in collaboration with you, identify options to overcome your issues whilst meeting the legislative requirements of this Act.

Stage 2: Development and implementation of an approved Drinking Water Quality Management Plan (DWQMP)

What do I need to do?

You will need to prepare and seek regulator approval of a DWQMP before the transitional phase expires (details of transitional phases are detailed below). You must then comply with your approved plan and any conditions of the plan.

A plan must:

- be prepared in accordance with guidelines issued by the regulator. A guideline on preparing a DWQMP will be developed in 2009/2010
- state the registered services to which the plan applies
- include details of the infrastructure for providing the services
- identify the hazards and hazardous events the drinking water service provider considers may affect the quality of water to which the services relate
- include an assessment of the risks posed by the hazards and hazardous events
- demonstrate how the drinking water service provider intends to manage the risks posed by the hazards and hazardous events
- include details of the operational and verification monitoring programs under the plan, including the parameters to be used for indicating compliance with the plan to the extent the plan requires the provider to maintain water quality in accordance with the water quality criteria for drinking water.

A DWQMP will need to demonstrate how the 12 elements of the management framework contained in Chapters 2 and 3 of the *Australian Drinking Water Guidelines* are met.

What do I need to monitor for when I have a DWQMP?

You must continue to undertake monitoring for water quality standards set by Queensland Health in the Regulation. Queensland Health has established standards for fluoride where drinking water is fluoridated; and for *Escherichia coli (E. coli)* in the **reticulation system** for the drinking water service. Frequency of sampling for *E. coli* based on the size of the population served by that service (refer to the ‘*Escherichia coli (E. coli)* monitoring guidance note’ in this information package for more information).

You must monitor for other relevant water quality parameters that are required for operational and verification monitoring as identified during the risk assessment process used to develop the DWQMP.

Guidance on developing an appropriate monitoring program for these parameters is provided in the *Australian Drinking Water Guidelines*.

When do I need to have an approved DWQMP?

Requirements for developing and implementing an approved DWQMP are phased in over time based on the size of the drinking water service provider as detailed in the transitional phases below.

A provider that was providing a drinking water service on or before 1 July 2008 must have an approved plan by:

- 1 July 2011 for large¹ service providers
- 1 July 2012 for medium² service providers
- 1 July 2013 for small³ service providers.

A service provider who becomes a drinking water service provider after 1 July 2008 must have an approved plan within 12 months of becoming a drinking water service provider.

A DWQMP is generally not required for a water storage. However, providers that store source water **containing recycled water** which will be used for **augmenting a drinking water supply**, must have an approved DWQMP prior to the recycled water being added to the storage (transitional phases do not apply). For example, a dam containing recycled water to be used to augment drinking

1 A large drinking water service provider is a service provider primarily providing bulk water services or a service provider with more than 25000 connections to a registered service.

2 A medium drinking water service provider is a service provider with more than 1000 but not more than 25000 connections to a registered service.

3 A small drinking water service provider is a service provider with 1000 or less connections to a registered service.

water supplies must have an approved DWQMP before the recycled water is added to that dam.

The transitional phases above do not apply to providers that **treat** water intended for drinking that is **sourced** from:

- a water storage containing recycled water which is intended to augment a drinking water supply, or
- water released from a water storage containing recycled water which is intended to augment a drinking water supply.

For example, if a provider obtains water for drinking purposes directly from a dam which contains recycled water for augmenting drinking water supplies, a DWQMP is required prior to the recycled water being added to the storage.

The regulator may also bring forward the requirement for a plan if the regulator is satisfied, or reasonably believes, the continued operation of the provider's drinking water service may have an adverse affect on public health.

How long does it take to get a DWQMP approved?

You should note that the transitional phases relate to a provider having a plan **approved** by the regulator, **not merely submitted** to the regulator.

Section 98 of the Act states the regulator must, when considering whether to approve a plan, decide the application **within three months after receiving the plan**. However, **if the regulator seeks additional information about the plan, the regulator must decide the application within three months of receiving that information**.

It is important that you allow for approval timeframes when developing and submitting your plan for approval and ensure all relevant information is provided with the application so that the regulator does not need to request additional information to make a decision.

What do I need to do when I have an approved DWQMP?

When your DWQMP is approved you must comply with the plan and any conditions of the approval by the regulator. The notice of the decision issued by the regulator approving the plan will also state:

- the intervals at which regular reviews must be conducted. The purpose of the review is to ensure the plan remains relevant having regard to the operation of the water service
- if required, the intervals at which regular audits must be conducted. The regular audit report must be prepared by an independent auditor certified under the Drinking Water-Quality Management System Auditor Certification Scheme. The purpose of the regular audit report is to verify the accuracy of the monitoring and performance data provided to the regulator, to assess compliance with the plan and to assess the relevance of the plan.

The regulator also has the power to arrange for spot audits to be prepared about a DWQMP.

What are the roles of the different government agencies with drinking water quality legislation responsibilities?

Department of Environment and Resource Management (Regulator)

The regulator has responsibility for:

- issuing notices about monitoring and reporting requirements to drinking water service providers
- approving DWQMPs
- setting water quality criteria for parameters for which no standards have been set by Queensland Health
- enforcing notices and DWQMPs and undertaking investigations and compliance actions and
- other matters under the Act.

In addition to having regulatory responsibilities, the regulator will prepare a Drinking Water Quality Improvement Strategy in 2010. The purpose of the strategy is to assist drinking water service providers to meet requirements of the new legislation.

To develop the strategy, it is expected that the regulator will utilise monitoring results from drinking water service providers and undertake site inspections of drinking water infrastructure around the state. The inspections will also include an assessment of operational practices and expertise requirements. Site inspections are likely to focus on small to medium service providers.

For further information about the Water Supply (Safety and Reliability) Act, please contact the department on (07) 3247 0375.

Queensland Health

Queensland Health also has regulatory responsibilities for drinking water including:

- setting drinking water quality standards under the Public Health Act
- issuing and enforcing improvement notices where the safety of drinking water may be compromised
- issuing and enforcing public health orders where a public health risk is identified.

The regulator will work with Queensland Health in response to incidents with public health implications.

For further information about the Public Health Act or the Public Health Regulation, please contact Queensland Health on (07) 3234 0938. You may also subsequently need to contact your local Population Health Unit.