

Title	Prepare a Water Safety Plan for a surface water supply with multistage treatment and medium-large distribution network		
Level	5	Credits	8

Purpose	<p>People credited with this unit standard are able to: develop an overview of the drinking-water supply, and sources of information relevant to water safety planning; identify the events that can lead to contamination of the drinking-water supply and describe the associated public health risk; identify barriers to contamination that are currently in place, and those required, to ensure safe drinking-water supply; identify the preventive measures, checks, corrective actions, and contingency plans for the drinking-water supply to ensure safe drinking-water; prepare an improvement schedule for the drinking-water supply; and perform an ongoing review of the drinking-water supply Water Safety Plan (WSP).</p>
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Classification	Water Industry > Drinking-Water Assessment
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Available grade	Achieved
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Guidance Information

- Legislation and references relevant to this unit standard include: Health Act 1956, and subsequent amendments;
Drinking-Water Standards for New Zealand, 2005 (Revised 2008). Ministry of Health, Wellington;
A Framework on How to Prepare and Develop Water Safety Plans for Drinking-Water Supplies, 2014, Ministry of Health, Wellington;
Water Safety Plan Guides for Drinking-Water Supplies (WSPs), Ministry of Health, Wellington;
 World Health Organisation guides are available from:
http://www.who.int/water_sanitation_health/publications/en/.
- Definitions
Drinking-water supply – the supply catchment, treatment plant, and distribution including tankers. The drinking-water supplier has responsibility for managing the public health risks of the drinking-water supply.
A medium-large distribution network is defined in the Health Act 1956 as a distribution network serving a population of >5000 people.
Multistage treatment refers to a treatment process that involves at least three individual processes. Examples include clarification, filtration, disinfection.
Organisational procedures – instructions to staff, and procedures which are documented in memo or manual format and are available in the workplace. These requirements include but are not limited to – site specific requirements,

manufacturers' specifications, product quality specifications, and legislative or regulatory requirements.

Water Safety Plan refers to a plan to ensure the safety and continuity of drinking water through the use of a comprehensive risk assessment and risk management approach that encompasses all steps in water supply from catchment to consumer.

Outcomes and performance criteria

Outcome 1

Develop an overview of the drinking-water supply, and sources of information relevant to water safety planning.

Performance criteria

- 1.1 Flow diagram of drinking-water supply identifies all supply elements in source, treatment, and distribution system.
- 1.2 Relevant sources of information are identified and described in terms of their relationship to identified supply elements.

Range may include but is not limited to – WSP Guides, piping and instrumentation (P and I) drawings, World Health Organisation (WHO) guides.

Outcome 2

Identify the events that can lead to contamination of the drinking-water supply and describe the associated public health risk.

Performance criteria

- 2.1 Typical events contributing to contamination are identified for the drinking-water supply.
- 2.2 Each event is described in terms of public health risk.

Outcome 3

Identify barriers to contamination that are currently in place, and those required, to ensure safe drinking-water supply.

Performance criteria

- 3.1 Barriers to contamination are identified in terms of those provided by the drinking-water supply to manage risks.
- 3.2 Risks are identified in terms of those hazards for which barriers are not currently in place in the drinking-water supply.

Outcome 4

Identify the preventive measures, checks, corrective actions, and contingency plans for the drinking-water supply to ensure safe drinking-water.

Performance criteria

- 4.1 Review of the drinking-water supply's preventive measures, checks, and corrective actions identifies those that are not present in drinking-water supply.
- 4.2 Review of the drinking-water supply's contingency plans identifies actions for managing the occurrence of the events identified in the WSP.

Outcome 5

Prepare an improvement schedule for the drinking-water supply.

Performance criteria

- 5.1 Assessment identifies improvements that can be made with low or no cost.
- 5.2 Improvements which require detailed planning and capital investment are prioritised based on risk.
- 5.3 Improvement schedule includes timelines, responsibilities, and costs.

Outcome 6

Perform an ongoing review of the drinking-water supply Water Safety Plan (WSP).

Performance criteria

- 6.1 Frequency of review of the WSP, and person responsible are identified in accordance with organisational procedures and legislative requirements.
- 6.2 Observations or records required for each supply element are identified in accordance with legislative requirements.

Range	frequency of observing or recording, location of records, responsibilities of people observing or maintaining records.
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- 6.3 Events that have occurred since last review and actions taken to avoid their reoccurrence are identified in accordance with organisational procedures and legislative requirements.
- 6.4 Changes to the supply elements are identified in relation to changes required to the WSP and in accordance with organisational procedures and legislative requirements.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 September 2008	31 December 2018
Review	2	16 March 2017	31 December 2022
Review	3	28 January 2021	31 December 2022

Consent and Moderation Requirements (CMR) reference	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.