

<b>Title</b>	<b>Demonstrate knowledge of and carry out water treatment plant maintenance work under supervision</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of plant maintenance relevant to water treatment; identify critical control points in water treatment that require maintenance and identify preventative actions and corrective actions for associated risks; and carry out water treatment plant maintenance work under supervision.
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<b>Classification</b>	Water Industry > Water Treatment
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable legislative and industry requirements.
- 2 Legislation relevant to this unit standard includes: Health and Safety at Work Act 2015, Water Services Act 2021, Hazardous Substances and New Organisms Act 1996, Health and Safety at Work (Hazardous Substances) Regulations 2017, Resource Management Act 1991, and subsequent amendments.
- 3 Definitions  
*Critical control point* – specific point, procedure, or step in water treatment processes at which control can be exercised to reduce, eliminate, or prevent the possibility of a public health hazard.  
*Industry requirements* include manufacturers' specifications; and enterprise requirements which may include documented workplace policies, procedures, specifications, business, and quality management requirements relevant to the workplace in which assessment is carried out.
- 4 Learning and assessment activities for this unit standard must be informed by Te Mana o te Wai (refer to [Taumata Arowai](#)) and the *National Policy Statement for Freshwater Management 2020* available from <https://environment.govt.nz/>.

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### Outcomes and performance criteria

#### Outcome 1

Demonstrate knowledge of plant maintenance relevant to water treatment.

**Performance criteria**

- 1.1 The purpose of plant maintenance is described in terms of business and public health risk.
- 1.2 The difference between planned and unplanned maintenance work is described.
- 1.3 Planned maintenance procedures are described for the processes relevant to own plant.
- 1.4 Unplanned maintenance procedures are described for the processes relevant to own plant.
- 1.5 Monitoring systems to assist planned maintenance are described.
- Range inspection and field tests, mechanical monitoring, equalising run time, recording, maintenance manuals.
- 1.6 Notification systems to identify when unplanned maintenance is required are described.

**Outcome 2**

Identify critical control points in water treatment that require maintenance and identify preventative actions, and corrective actions for associated risks.

**Performance criteria**

- 2.1 Critical control points to processes requiring maintenance are described in terms of risks and consequential impacts on water treatment.
- 2.2 The preventive and corrective actions for potential problems or events related to each risk are identified in water treatment.

**Outcome 3**

Carry out water treatment plant maintenance work under supervision.

**Performance criteria**

- 3.1 Work is carried out and recorded.
- 3.2 Process continuity is maintained during procedures.

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<b>Planned review date</b>	31 December 2026
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**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	16 March 2017	31 December 2024
Review	2	24 February 2022	N/A

**Consent and Moderation Requirements (CMR) reference**

0101

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Comments on this unit standard**

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at [qualifications@waihanga.nz](mailto:qualifications@waihanga.nz) if you wish to suggest changes to the content of this unit standard.