

<b>Title</b>	<b>Demonstrate knowledge of risks and risk management in wastewater treatment plants</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of risk management in wastewater treatment; and describe the management of risks associated with wastewater treatment plants.
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<b>Classification</b>	Water Industry > Wastewater 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 organisational procedures and legislative requirements.
- 2 Legislation, regulations and industry standards relevant to this unit standard include but are not limited to – Health and Safety at Work Act 2015; Resource Management Act 1991; Hazardous Substances and New Organisms (HSNO) Act 1996, AS/NZS ISO 31000:2009 *Risk management – Principles and guidelines*; and, any subsequent amendments or replacements.
- 3 Definitions
 

*Events* – unplanned circumstances that negatively affects the plant’s performance. Events may include – flooding, water ingress, mechanical malfunction, natural disaster, illegal discharge, illegal trade waste, hydraulic overloading, toxicity overloading, computer/PLC system malfunction, electricity disruption, human intervention.

*Organisational procedures* – instructions to staff and procedures which are documented in memo or manual format and are available in the workplace. These procedures include but are not limited to – site specific procedures, laboratory procedures, manufacturers’ specifications, product quality specifications and reference to legislative or regulatory procedures relevant to the industry.

*Wastewater* may include stormwater, domestic wastewater, trade wastewater, or other sewerage systems.

*Wastewater treatment plants* – sites where at least two unit process operations are used to improve wastewater quality for the purposes of reducing the pollution content of the wastewater before return to the environment.

## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of risk management in wastewater treatment.

#### Performance criteria

1.1 The impact of legislation on the management of risks, including non-compliance, is explained.

Range Resource Management Act 1991, Hazardous Substances and New Organisms Act 1996, Health and Safety at Work Act 2015.

1.2 The principles of risk management are described in terms of their impact on development of organisational procedures for the treatment of wastewater.

### Outcome 2

Describe the management of risks associated with wastewater treatment plants.

Range types of wastewater – domestic wastewater, stormwater, trade wastewater; evidence of two events for each type of wastewater is required.

#### Performance criteria

2.1 Risks are described in terms of events that may occur, their causes, and potential consequences.

2.2 The remediation and management of events are described.

2.3 Contingency plans to prevent the re-occurrence of events are described.

<b>Replacement information</b>	This unit standard replaced unit standard 29944.
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Planned review date	31 December 2024
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 September 2019	N/A

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

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**Comments on this unit standard**

Please contact Connexis - Infrastructure Industry Training Organisation  
[qualifications@connexis.org.nz](mailto:qualifications@connexis.org.nz) if you wish to suggest changes to the content of this unit standard.