

<b>Title</b>	<b>Demonstrate knowledge of complex water reticulation assets, their components and fittings, and procedures used for them</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>8</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of complex water reticulation assets; and demonstrate knowledge of components, fittings, and procedures used for complex water reticulation assets.
----------------	--

<b>Classification</b>	Infrastructure Works > Pipeline Construction and Maintenance
-----------------------	--

<b>Available grade</b>	Achieved
------------------------	----------

---

### 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 and any subsequent amendments.
- 3 Definitions  
*Complex water reticulation assets* include the mechanical and electrical plant and equipment associated with water industry infrastructure assets such as pumps, mechanical screens, water booster stations and treatment devices.  
*Industry requirements* refer to relevant policies, processes, methodologies, industry codes of practice, site specific health and safety plans, standard operating procedures, site safety plans, quality plans, work plans, traffic management plans, contract work programmes, job safety analysis, safe work method statements, job instructions, manufacturer's requirements, contract specifications, manuals, procedural documents, Waka Kotahi New Zealand Transport Agency specifications and guidelines.  
*Water reticulation* refers to networks for drinking-water, wastewater, or stormwater.

---

### Outcomes and performance criteria

#### Outcome 1

Demonstrate knowledge of complex water reticulation assets.

Range evidence of three assets is required.

**Performance criteria**

- 1.1 Complex assets are described in terms of their purpose, function, and inter-relationships with water reticulation networks.
- 1.2 Components of complex assets are explained in terms of their purpose and function.
- 1.3 Quality control and flow management operations for complex assets are described.
- 1.4 Causes of complex asset failure are explained in terms of their impacts, diagnosis and prevention.

Range corrosion, malfunction, blockages, loss of electricity.

**Outcome 2**

Demonstrate knowledge of components, fittings, and procedures used for complex water reticulation assets.

**Performance criteria**

- 2.1 Types of complex asset materials, plant and equipment are described in terms of their features, uses, and maintenance requirements.
- 2.2 Fittings for complex assets are described in terms of their uses, manufacturer's specifications, and selection criteria.
- 2.3 Procedures for shutting down and recommissioning a complex asset are described.
- 2.4 Procedures for maintaining complex assets are described.
- 2.5 Rehabilitation and replacement of complex asset components are described in terms of requirements and procedures.

<b>Planned review date</b>	31 December 2026
----------------------------	------------------

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	26 August 2021	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0101
--	------

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

---

**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.