

Field Engineering and Technology

Review of *Water Industry* unit standards

Subfield	Domain	ID
Water Industry	Wastewater Treatment	24916, 24931, 29929, 29931
	Water - Generic	17871, 17874, 19200, 30008
	Water Treatment	17890, 24915, 29962-29965, 29996-29998

Waihanga Ara Rau Construction and Infrastructure Workforce Development Council has completed the review of the unit standards listed above.

Date new versions published

February 2022

Planned review date

December 2026

Summary

Waihanga Ara Rau Construction and Infrastructure Workforce Development Council reviewed level 3 unit standards in the Water Industry subfield as part of a scheduled review and in preparation of programmes towards the New Zealand Certificate in Water Treatment (Small Scale Systems) (Level 3) with strands in Drinking-water and Wastewater [Ref: 2240]. Consultation with industry occurred by email and via the Connexis website during 2021. Stakeholders suggested updates to legislation. The Connexis Reference Group supported the development.

Main changes

- Titles of some unit standards were amended to align with small-scale systems, and some credit values were slightly adjusted to align with other unit standards in the suite.
- Guidance Information was updated in all unit standards to acknowledge the establishment of Taumata Arowai.
- Major changes were made to unit standards 24915 and 24916 and these were replaced with standards with unit standards 33013 and 33008 respectively.
- Unit standard 29962 was designated expiring because it is no longer required.
- Three new unit standards were developed to meet training needs in small-scale systems.

Category C and D unit standards will expire at the end of December 2024

The last date for assessment of superseded versions of Category B unit standards is December 2024

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Engineering and Technology > Water Industry > Wastewater Treatment

ID	Title	Level	Credit	Review Category
24916	Demonstrate knowledge of the legislative framework and agencies relevant to wastewater treatment	3	4	C
33008	Demonstrate knowledge of the legislative framework relevant to small wastewater systems	3	5	
24931	Demonstrate knowledge of pumping systems in wastewater treatment	3	6	B
29929	Carry out wastewater treatment operations under supervision	3	5	B
29931	Describe treatment processes for wastewater	3	6	B
33010	Demonstrate knowledge of small wastewater systems	3	5	New
33011	Operate and maintain a small wastewater system	3	8	New
33012	Undertake sampling and water quality monitoring for a small wastewater system	3	7	New

Engineering and Technology > Water Industry > Water - Generic

ID	Title	Level	Credit	Review Category
17871	Describe safe practices when working with hazards in water and wastewater treatment plants	3	4	B
	Describe safe practices when working with hazards in small drinking-water and wastewater systems		5	
17874	Demonstrate knowledge of basic science theory relating to water	3	6	B
19200	Demonstrate knowledge of, and apply, mathematics in the water industry	3	4	B
30008	Demonstrate knowledge of pathogens, diseases, and their control in water treatment	3	5	B
	Describe pathogens, diseases, and their control in water treatment			

Engineering and Technology > Water Industry > Water Treatment

ID	Title	Level	Credit	Review Category
17890	Undertake sampling and site analysis for water treatment	3	6	B
24915	Demonstrate knowledge of the legislative framework and agencies relevant to drinking-water supply	3	5	C
33013	Demonstrate knowledge of the legislative framework relevant to small drinking-water systems	3	5	
29962	Carry out drinking-water treatment operations under supervision	3	5	D
29963	Demonstrate knowledge of and carry out water treatment plant maintenance work under supervision	3	5	B
29964	Demonstrate knowledge of treatment processes for drinking-water treatment	3	5	B
	Describe treatment processes for drinking-water treatment			

ID	Title	Level	Credit	Review Category
29965	Demonstrate knowledge of small drinking-water supplies Demonstrate knowledge of small drinking-water systems	3	6 5	B
29996	Demonstrate knowledge of and apply principles of water safety planning for a small drinking-water supply Demonstrate knowledge of and apply principles of water safety planning for a small drinking-water system	3	5	B
29997	Operate and maintain a small drinking-water system	3	8	B
29998	Undertake sampling and water quality monitoring for a small drinking-water supply Undertake sampling and water quality monitoring for a small drinking-water system	3	7	B