

Field Engineering and Technology

Review of *Wastewater Treatment* unit standards

Subfield	Domain	ID
Water Industry	Wastewater Treatment	17877, 19197, 19198, 24927, 24948, 29930, 29932-29943, 29945-29948, 29950-29961, 29993

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

Date new versions published

April 2022

Planned review date

December 2026

Summary

Waihanga Ara Rau Construction and Infrastructure Workforce Development Council reviewed unit standards in the Wastewater Treatment domain as part of a scheduled review. Consultation with industry occurred by email and via the Connexis website. Stakeholders recommended updating the legislation and including a statement on Te Mana o te Wai. Both recommendations were actioned.

Main changes

- Guidance Information was updated in all unit standards to align with changes to water regulation.
- A theoretical outcome was removed from 11 unit standards at level 5 in order to focus assessment on the practical outcomes.
- Seven unit standards were designated expiring because of low usage.

The last date for assessment of superseded versions of Category B unit standards is December 2023

Category D unit standards will expire in December 2023

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
17877	Operate and monitor a wastewater treatment plant	4	10	B
19197	Report on a wastewater treatment plant topic or improvement	5	10	B
19198	Assess the optimisation of a wastewater treatment plant, and describe critical control points	5	12	B

ID	Title	Level	Credit	Review Category
24927	Describe, and undertake sampling and testing procedures for wastewater treatment	4	7	B
24948	Describe the characteristics of, and sources that affect wastewater	4	6	B
29930	Describe and operate activated sludge processes in wastewater treatment	4	16	B
29932	Describe and operate effluent disinfection processes in wastewater treatment	4	8	B
29933	Interpret data to determine the effect of effluent discharge on the environment	5	10	B
29934	Describe and operate wastewater effluent application to land	4	6	B
29935	Manage, monitor, and optimise activated sludge processes in wastewater treatment	5	14	B
29936	Manage, monitor, and optimise treated sludge and biosolids processes, and dispose of biosolids, in wastewater treatment	5	15	B
29937	Manage, monitor, and optimise effluent disinfection processes in wastewater treatment	5	8	B
29938	Describe and operate effluent filtration processes in wastewater treatment	4	12	B
29939	Manage, monitor, and optimise fixed growth reactor processes in wastewater treatment	5	12	B
29940	Carry out microbiological monitoring for wastewater treatment	4	4	B
29941	Manage, monitor, and optimise lagoon processes in wastewater treatment	5	7	B
29942	Manage, monitor, and optimise effluent filtration processes in wastewater treatment	5	14	B
29943	Manage, monitor, and optimise oxidation pond processes in wastewater treatment	5	8	B
29945	Manage, monitor, and optimise separation processes in wastewater treatment	5	10	B
29946	Manage, monitor, and optimise wetlands processes in wastewater treatment	5	8	B
29947	Manage, monitor, and optimise nutrient removal processes in wastewater treatment	5	16	D
29948	Describe and operate lagoon processes in wastewater treatment	4	6	D
29950	Describe and operate nutrient removal processes in wastewater treatment	4	14	B
29951	Manage, monitor, and optimise odour control processes in wastewater treatment	5	10	D
29952	Describe and operate fixed growth reactor processes in wastewater treatment	4	10	B
29953	Describe and operate odour control processes in wastewater treatment	4	9	D
29954	Describe and operate oxidation pond processes in wastewater treatment	4	6	D
29955	Describe and operate preliminary processes in wastewater treatment	4	7	B
29956	Describe and operate wetlands processes in wastewater treatment	4	8	D

ID	Title	Level	Credit	Review Category
29957	Describe and operate separation processes in wastewater treatment	4	9	B
29958	Describe and operate sludge treatment processes in wastewater treatment	4	12	B
29959	Demonstrate knowledge of the regulatory framework relevant to wastewater treatment	4	4	B
29960	Manage, monitor, and optimise sludge treatment processes in wastewater treatment	5	14	B
29961	Demonstrate knowledge of treated wastewater effluent reuse	4	8	D
29993	Manage, monitor, and optimise preliminary processes in wastewater treatment	5	8	B