

41229 Manage wastewater effluent application to the receiving environment

Kaupae Level	4
Whiwhinga Credit	10
Whāinga Purpose	This skill standard is for people who work as wastewater treatment operators. People with this skill standard have the skills to manage wastewater effluent, and application to the receiving environment to meet operational, environmental, and regulatory requirements. This skill standard aligns with the New Zealand Certificate in Wastewater Treatment Operations (Level 4) with optional strands in Activated Sludge, Effluent Disinfection, Fixed Growth Reactor, Separation, Sludge Treatment, and Ponds [Ref: 5673] and may also contribute to other water services industry credentials.

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Determine appropriate options for discharging treated wastewater effluent to the receiving environment.	a. Identify discharge options for treated wastewater effluent in relation to consent conditions, environmental constraints, and operational requirements.
	b. Identify applicable legislation, regulations, and consent conditions relevant to wastewater effluent discharge.
	c. Evaluate the suitability of receiving environments for treated wastewater effluent based on environmental, operational, and regulatory factors.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
2. Manage wastewater effluent discharge to the receiving environment.	a. Adjust wastewater effluent discharge to receiving environment, to ensure compliance with consent and regulatory requirements.
	b. Undertake testing of wastewater effluent discharge to ensure compliance with operational, consent and regulatory requirements.
	c. Maintain discharge equipment and infrastructure to ensure effective and reliable operation.
	d. Complete discharge monitoring records and reports in accordance with operational requirements and regulatory requirements.
	e. Manage, and escalate risks associated with wastewater effluent discharge to self, workplace, environment, and the public in accordance with organisational requirements.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Ākonga must demonstrate that they can safely, consistently, and competently manage wastewater effluent application to the receiving environment in accordance with operational requirements, and applicable legislative and regulatory requirements.

Assessment for this skill standard must be based on practical performance and supported by evidence that must take place in an operational wastewater treatment environment.

Assessment must cover the full range of effluent application to the receiving environment processes relevant to the candidate's workplace.

Evidence must demonstrate consistent performance over time, not one-off tasks.

Definitions

Candidate's workplace (for assessment purposes) means the operational treatment site(s) nominated by the employer as the workplace for assessment, that includes the full range of processes relevant to this assessment standard and to the candidate's expected duties. Where the employer operates multiple treatment sites, the nominated workplace must not be limited to a site with minimal relevant processes where this would prevent evidence being gathered for the full range of processes relevant to this assessment standard.

Operational requirements refer to the documented and embedded ways of working that govern how activities are planned, performed, monitored, and controlled in the workplace to ensure safe, consistent, and compliant operations.

Water services refer to industries responsible for working on or around water supplies, networks, plants, and systems.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

- Receiving environments and discharge pathways e.g. pond loading, algae, indicator organisms, inflow and outflow are characteristics used to assess the suitability and performance of receiving environments and discharge pathways.
- Seasonal and environmental influences on discharge.
- Consent conditions and compliance requirements e.g. consent limits, public health and environmental protection.
- Effluent quality parameters e.g. Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Dissolved Oxygen (DO).
- Process monitoring and process testing including sensory observation.
- Biological and chemical treatment considerations on effluent quality and discharge suitability.
- Equipment operation and maintenance.
- Risk identification, control, and escalation relating to abnormal, non-compliant, or unsafe discharge conditions.
- Record keeping and reporting requirements.

Rauemi | Resources

Legislation, regulations and/or industry standards relevant to this skill standard include, but are not limited to:

- Biosolids Reuse Guidelines - [Guidelines for Beneficial Use of Organic Materials on Productive Land](#) and [Beneficial reuse of biosolids standard | The Water Services Authority - Taumata Arowai](#).
- Wastewater Standards - [Wastewater standards | The Water Services Authority - Taumata Arowai](#).
- National Wastewater Environmental Performance Standards - [Discussion-document-National-wastewater-environmental-performance-standards-FINAL.pdf](#).

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Energy and Infrastructure Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Engineering and Technology > Water Industry > Wastewater Treatment
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	28 May 2026	N/A
Kōrero whakakapinga Replacement information	N/A		
Rā arotake Planned review date	31 December 2032		

Please contact Energy and Infrastructure Industry Skills Board at qualifications@energyinfra-skills.nz if you wish to suggest changes to the content of this skill standard.