40588 Operate a screening plant in a resource recovery environment

Kaupae Level	3
Whiwhinga Credit	15
Whāinga Purpose	This skill standard is intended for people who are already working in a resource recovery environment which processes organic materials. People credited with this skill standard will be able to operate a screening plant for processing organic materials and carry out routine maintenance.
	This skill standard aligns with the New Zealand Certificate in Resource Recovery (Level 3) with strands in Organic Materials Processing, Recovery and Recycling, and Metal Recycling [Ref: 2744].
Whakaakoranga me mātua oti Pre-requisites	Learners/ākonga must have completed a workplace health and safety induction or demonstrate equivalent knowledge and skills.

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria		
1. Prepare to operate a screening plant in a resource recovery environment.	 Plan screening plant operations to meet product and quality requirements. 		
	b. Prepare work area for operations.		
	c. Assess hazards and risks, and follow risk controls for screening plant operations.		
	d. Conduct a prestart check of machinery and equipment.		
	e. Install screens to meet job specifications.		
	f. Confirm job requirements or handover details.		
	g. Rectify or report any issues affecting quality or safety requirements.		

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria		
Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria		
2. Operate a screening plant in a resource recovery environment.	 a. Carry out machine start up and shut down procedures safely. b. Operate screening plant in accordance with conditions and equipment operating capacities. c. Carry out screening operations in accordance with site operations plan and job requirements. 		
3. Monitor the conditions of organic materials in a screening plant.	a. Measure parameters of organic materials.b. Record and/or report organic materials measurements.		
4. Maintain a screening plant in a resource recovery environment.	 a. Conduct maintenance inspection of screening plant. b. Carry out routine maintenance of screening plant. c. Report any specialist maintenance requirements or faults to supervisor. d. Maintain screening plant operational records. 		

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

Assessment specifications:

Evidence presented for assessment against this skill standard must be consistent with safe working practices and be in accordance with applicable service information, workplace procedures and legislative requirements.

Definitions

Organic materials processing includes anaerobic digestion, biofuel, compost production, or materials separation for contamination and/or size.

Workplace procedures refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, manufacturer's requirements, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the resource recovery industry.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Preparation

- Prestart check including fluids & grease checks, inspection for damage, running speeds.
- Preparation of work area such as complementary machinery, input materials and output locations.
- Correct use of Personal Protection Equipment (PPE).

Machine operations

- Operation of machinery according to conditions such as load capacity, material types, material conditions, contamination, suitability of location, weather, visibility and time of day.
- Safe operating procedures such as observing speed limits, working clearances, safety checks, use of two way radio for communication, safety of all personnel and other machines, emergency procedures.
- Removal of contaminants such as metal and plastic.
- Monitoring and reporting of organic material conditions yield, contamination, moisture, particle size.

Maintenance

- Safety guidelines regarding lock-out tag-out procedures and policies before undertaking maintenance.
- Routine maintenance such as greasing moving parts, checking fluid levels, and cleaning.
- Reporting of specialist maintenance requirements.

Rauemi | Resources

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

- Hazardous Substances and New Organisms Act 1996.
- Health and Safety at Work Act 2015.
- Resource Management Act 1991.
- NZS 4454:2005 Composts, soil conditioners and mulches. Available from: <u>https://www.standards.govt.nz/</u>.
- Standards Australia. AS 4454:2012 Composts, soil conditioners and mulches. Available from: <u>https://store.standards.org.au/</u>.
- Bioenergy Association. Solid Biofuel Classification Guidelines, Technical Guide 1: Solid Biofuel Classification Guidelines. Available from: <u>https://www.usewoodfuel.org.nz/</u>.
- Bioenergy Association. Solid Biofuel Classification Guidelines, Technical Guide 5: Standard methods for verifying the quality of solid biofuels. Available from: https://www.usewoodfuel.org.nz/.
- Bioenergy Association. The Production And Use As Biofertiliser Of Digestate Derived From Source Segregated Organic Waste. BANZ Technical Guide 8. Available from: <u>https://www.biogas.org.nz/</u>.
- BSI PAS 110: 2014 Specification for whole digestate, separated liquor and separated fibre derived from anaerobic digestion of source-separated biodegradable materials. Available from: <u>https://www.wrap.ngo/</u>.
- New Zealand Water and Wastes Association. (current edition). Guidelines for the safe application of biosolids to land. Available from: <u>https://www.waternz.org.nz/</u>.
- UK Environment Agency. (current edition). Technical Guidance Note (Monitoring), M9. *Environmental monitoring of bioaerosols at regulated facilities.* Available from: <u>https://www.gov.uk/</u>.

 Worksafe Guidance to working with hazardous substances. Available from: <u>https://www.worksafe.govt.nz/</u>.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this skill standard will take precedence for assessment purposes, pending review of this skill standard. Legislation can be accessed at: https://www.legislation.govt.nz.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa	Hanga-Aro-Rau Manufacturing, Engineering	
Standard Setting Body	and Logistics Workforce Development Council	
Whakaritenga Rārangi Paetae Aromatawai	Service Sector > Resource Recovery >	
DASS classification	Composting	
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0014	

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment	
Rēhitatanga Registration	1	27 March 2025	N/A	
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 23306.			
Rā arotake Planned review date	31 December 2029			

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development at <u>gualifications@hangaarorau.nz</u> to suggest changes to the content of this skill standard.