

40357 Take and process product samples in an energy and chemical plant

Kaupae Level	3
Whiwhinga Credit	3
Whāinga Purpose	<p>This skill standard is intended for people working as boiler operators and energy and chemical process operators in an energy or chemical plant. People credited with this skill standard are able to: describe product sampling in the energy and chemical industry; and take and process product samples in an energy and chemical plant.</p> <p>This skill standard can be used in the New Zealand Energy and Chemical qualifications at Levels 3 and above.</p>

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Describe product sampling in the energy and chemical industry.	a. Describe reasons for product sampling.
	b. Identify types of sample containers and describe the sample they would be used to collect.
2. Take and process product samples in an energy and chemical plant.	a. Identify materials to be sampled in accordance with organisational requirements.
	b. Interpret plant documentation to identify hazards to personnel health and safety and the required precautions to be taken in accordance with organisational requirements.
	c. Take samples using safe work practices in accordance with organisational requirements.
	d. Identify and locate plant sampling points in accordance with organisational requirements.
	e. Check samples to ensure they are representative and free of contamination in accordance with organisational requirements.
	f. Process, label, and report samples to the supervisor in accordance with organisational requirements.

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

- Evidence of three (3) product samples is required for both learning outcomes 1 and 2.
- Evidence of three (3) different samples from different material sources, and at least two (2) different materials is recommended.
- Evidence for the practical components of this skill standard must be supplied from the workplace.

Definitions:

Energy and chemical plant may be in – petrochemical, agri-nutrient, power generation, dairy processing, meat processing, and wood fibre manufacturing, or other plants that operate with a combination of high temperatures, pressures, steam and/or chemicals in gas, liquid or solid form.

Organisational requirements – documented policies and procedures. These may include: equipment manufacturers' procedures; plant procedures; suppliers' instructions; site signage; codes of practice; company health and safety plans; on site briefings; and supervisor's instructions. This includes all regulatory and legislative obligations that apply to the plant.

Plant – the operational unit, equipment and/or workplace at which the person is working.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

None.

Rauemi | Resources

Legislation and regulations relevant to this unit standard includes but is not limited to:

- Health and Safety at Work Act 2015;
 - Health and Safety at Work (Hazardous Substances) regulations 2017 (HSWA);
 - Resource Management Act 1991;
- and any subsequent amendments.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Manufacturing > Energy and Chemical Plant > Monitoring of Energy and Chemical Plant
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0079

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	30 January 2025	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 3060.		
Rā arotake Planned review date	31 December 2029		

Please contact Hanga-Aro-Rau Engineering, Manufacturing and Logistics Workforce Development Council at qualifications@hangaarorau.nz to suggest changes to the content of this skill standard.