

40368 Use and monitor safety equipment in an energy and chemical plant

Kaupae Level	3
Whiwhinga Credit	5
Whāinga Purpose	<p>This skill standard is intended for people working as boiler operators and energy and chemical process operators in an energy and chemical plant.</p> <p>People credited with this skill standard are able to describe: personnel safety equipment and systems; and describe responsibilities under the Health and Safety at Work Act. They are also able to: maintain and monitor personnel safety equipment; and identify and comply with PPE requirements, 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 personnel safety equipment and systems in an energy and chemical plant.	a. Describe plant personnel safety equipment in terms of function and use.
	b. Identify personal protective equipment (PPE) in terms of purpose and use and describe the areas where it is necessary.
	c. Describe failure to correctly use hearing and respiratory protection in terms of consequences.
	d. Describe responses required to site alarm systems.
	e. Describe requirements for the use of personnel work safety systems.
2. Describe responsibilities under the Health and Safety at Work Act 2015 in an energy and chemical plant.	a. Describe employee responsibilities in an energy and chemical plant in terms of the Act.
	b. Describe employer responsibilities in an energy and chemical plant in terms of the Act.
	c. Describe potential penalties for breach of these responsibilities in terms of the Act.
	d. Describe codes of practice relevant to the plant in terms of the Act.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
3. Maintain and monitor personnel safety equipment in an energy and chemical plant.	a. Maintain condition of plant personnel safety equipment.
	b. Document and report results of monitoring safety equipment.
4. Identify and comply with PPE requirements in an energy and chemical plant.	a. Use PPE in accordance with organisational requirements.
	b. Maintain PPE.

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

Assessment specifications:

- evidence for the practical components of this unit standard must be supplied from the workplace.
- evidence for all outcomes must be presented in accordance with organisational requirements.
- 1a: evidence of three (3) items of equipment is required.
- 1b: evidence of three (3) items of PPE is required.
- 1c: evidence of one (1) consequence of inadequate hearing protection and one (1) consequence of inadequate respiratory protection is required.
- 1e: personnel safety systems include but are not limited to – isolation procedures, permit to work procedures, hot work, confined space entry procedures, hazard management systems, access procedures; evidence of three (3) personnel safety systems is required.
- 2a: evidence of three (3) responsibilities is required.
- 2b: evidence of five (5) responsibilities is required.
- 2d: evidence of two (2) codes of practice is required.
- Learning Outcome 3: evidence of two (2) items of safety equipment is required.

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

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

- Personnel safety equipment, such as– first aid stations, eyewash, safety showers, fire-fighting equipment, gas detection monitors, breathing apparatus.
- PPE, such as– hearing protection, hard hats, eye protection, safety footwear, gloves, dust masks, respirators, fire retardant clothing.
- Alarms, such as– evacuation, fire, gas detection, all clear, muster, emergency shutdown procedure.

Rauemi | Resources

Legislation and regulations relevant to this unit standard include but are 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 > Safety and Legislation for 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 21469.		
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.