

## 40448 Apply and monitor risk assessment procedures in an energy and chemical plant

<b>Kaupae   Level</b>	4
<b>Whiwhinga   Credit</b>	5
<b>Whāinga   Purpose</b>	<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: identify sources and effects of hazards in an energy and chemical plant; and apply and monitor risk assessment procedures, in an energy and chemical plant.</p> <p>This skill standard can be used in the New Zealand Energy and Chemical qualifications at Level 4 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. Identify sources and effects of hazards in an energy and chemical plant.	a. Identify the sources and effects of hazards that impact on workers and the work environment.
2. Apply risk assessment procedures in an energy and chemical plant.	a. Identify the health and safety risks that impact on safe operations and apply risk assessment procedures in an energy and chemical plant in accordance with organisational requirements.
	b. Apply risk management procedures to manage the identified risks in accordance with organisational requirements.
	c. Advise relevant personnel of any actions required to mitigate hazards in accordance with organisational requirements.
3. Monitor risk assessment procedures used in an energy and chemical plant.	a. Monitor the effectiveness of risk assessment procedures in accordance with organisational requirements.
	b. Identify and report any deviations from operational safety standards to responsible personnel in accordance with organisational requirements.
	c. Complete all plant documentation related to the risk assessment process in accordance with organisational requirements.

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

## Assessment specifications:

- evidence for the practical components of this skill standard must be supplied from the workplace.
- 1a: sources include but are not limited to – process conditions, workplace conditions, machinery, handling processes, pollution. Effects include but are not limited to – physical damage, overuse of resources, lost production, non-compliance with legal responsibilities.
- 1b: procedures include but are not limited to – eliminate, minimise, inspection, incident and/or accident reporting, on-going review, accident investigator.
- 2a: risk assessment procedures include but are not limited to – an assessment of probability, level of risk, identification of consequences.
- 3c: documentation includes but is not limited to – hazard identification forms, risk assessment reports.

## Definitions:

*Energy or 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.

*Hazard* – the meaning used in section 2 of the Health and Safety at Work Act 2015.

*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.

**Ngā momo whiwhinga** | Grades available

Achieved

**Ihirangi waitohu** | Indicative content

None

**Rauemi** | Resources

Legislation relevant to this skill standard includes but is not limited to:

- Health and Safety at Work Act 2015;
  - Hazardous Substances and New Organisms Act 1996;
  - Resource Management Act 1991;
- and any subsequent amendments.

**Pārongo Whakaū Kouna | Quality assurance information**

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

<b>Hātepe  </b> Process	<b>Putanga  </b> Version	<b>Rā whakaputa  </b> Review Date	<b>Rā whakamutunga mō te aromatawai  </b> Last date for assessment
<b>Rēhitatanga  </b> Registration	1	24 April 2025	N/A
<b>Kōrero whakakapinga  </b> Replacement information	This skill standard replaced unit standard 28283.		
<b>Rā arotake  </b> Planned review date	31 December 2029		

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