

## 40439 Purge systems in an energy and chemical plant

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| <b>Kaupae   Level</b>     | 4  |
| <b>Whiwhinga   Credit</b> | 10   |
| <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: describe the purpose and methods of purging and purging media in the energy and chemical industry; and purge systems 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. Describe the purpose and methods of purging and purging media in the energy and chemical industry. | a. Describe purging in terms of its purpose.  |
|   | b. Describe purging in terms of the methods used.   |
|   | c. Describe purging media in terms of use, selection, and potential hazards.  |
| 2. Purge systems in an energy and chemical plant.   | a. Identify boundaries of the system to be purged.  |
|   | b. Identify the method of purging, purging equipment, material to be purged, purging media, and destination of purged products. |
|   | c. Isolate, purge, and monitor the system to be purged.   |
|   | d. Verify the effectiveness of purge.   |
|   | e. Document and report the purging operation.   |

**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.
- evidence for all outcomes must be presented in accordance with organisational requirements.
- 1a: evidence of three (3) purposes is required.
- 1b: methods include but are not limited to – sweep, partial pressure, water, steam, air.
- 1c: evidence of one (1) inert gas and two (2) other examples is required.
- Learning Outcome 2: evidence of two (2) purging operations, one (1) of which may be simulated, 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* – 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 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

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| <b>Ngā rōpū whakatau-paerewa</b>  <br>Standard Setting Body                                | Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council |
| <b>Whakaritenga Rārangi Paetae Aromatawai</b>  <br>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>  <br>CMR | 0079   |

| <b>Hātepe</b>   Process                                 | <b>Putanga</b>  <br>Version                       | <b>Rā whakaputa</b>  <br>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>  <br>Replacement information | This skill standard replaced unit standard 21455. |                                      |  |
| <b>Rā arotake</b>  <br>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.