| Title | Describe hazard management, and apply and monitor risk assessment procedures in an energy and chemical plant |         |   |
|-------|--|---------|---|
| Level | 4  | Credits | 5 |

| Purpose | This unit standard is intended for people working as boiler operators and energy and chemical process operators in an energy and chemical plant.  |  |
|---------|---|--|
|         | People credited with this unit standard are able to: identify sources and effects of hazards and Identify sources and effects of hazards and describe hazard management procedures used in an energy and chemical plant; and apply and monitor risk assessment procedures, in an energy and chemical plant. |  |

| Classification | Energy and Chemical Plant > Operation of Energy and Chemical Plant |
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| Available grade Achieved | 40 |
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## **Guidance Information**

- 1 Legislation relevant to this unit 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.

# 2 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.

- 3 For the purposes of assessment:
  - evidence for the practical components of this unit standard must be supplied from the workplace.

# Outcomes and performance criteria

#### **Outcome 1**

Identify sources and effects of hazards and describe hazard management procedures used in an energy and chemical plant.

#### Performance criteria

1.1 Identify the sources and effects of hazards that impact on workers and the work environment.

Range

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.

1.2 Describe procedures used to control hazards in an energy or chemical plant.

Range

methods include but are not limited to – eliminate, minimise, inspection, incident and/or accident reporting, on-going review, accident investigator.

#### Outcome 2

Apply risk assessment procedures in an energy and chemical plant.

#### Performance criteria

2.1 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.

Range

risk assessment procedures include but are not limited to – an assessment of probability, level of risk, identification of consequences.

- 2.2 Apply reasonably practicable controls to manage the identified risks in accordance with organisational requirements.
- 2.3 Advise relevant personnel of any actions required to mitigate hazards in accordance with organisational requirements.

## **Outcome 3**

Monitor risk assessment procedures used in an energy and chemical plant.

## Performance criteria

- 3.1 Monitor risk assessment procedures to ensure compliance in accordance with organisational requirements.
- 3.2 Identify and report any variance or non-compliance to relevant personnel in accordance with organisational requirements.
- 3.3 Complete all plant documentation related to the risk assessment process in accordance with organisational requirements.

Range documentation includes but is not limited to – hazard identification forms, risk assessment reports.

| Replacement information | This unit standard was replaced by skill standard 40448. |
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|                         |  |

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

| Process      | Version | Date             | Last Date for Assessment |
|--------------|---------|------------------|--------------------------|
| Registration | 1       | 24 October 2014  | 31 December 2022         |
| Review       | 2       | 27 February 2020 | 31 December 2026         |
| Review       | 3       | 24 April 2025    | 31 December 2026         |

| Consent and Moderation Requirements (CMR) reference | 0079 |
|---|------|
|---|------|

This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.