

Title	Demonstrate knowledge of, use, and monitor safety equipment in an energy and chemical plant		
Level	3	Credits	5

Purpose	<p>This unit 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 unit standard are able to demonstrate knowledge of: 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>
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Classification	Energy and Chemical Plant > Safety and Legislation for Energy and Chemical Plant
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Available grade	Achieved
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Guidance Information

- 1 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

- 2 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.

- 3 For the purposes of assessment:
 - 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.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of personnel safety equipment and systems in an energy and chemical plant.

Performance criteria

1.1 Describe safety equipment used in terms of function and use.

Range safety equipment may include but is not limited to – first aid stations, eyewash, safety showers, fire-fighting equipment, gas detection monitors, breathing apparatus; evidence of three items of equipment is required.

1.2 Identify personal protective equipment (PPE) in terms of purpose and use and describe the areas where it is necessary.

Range PPE may include but is not limited to – hearing protection, hard hats, eye protection, safety footwear, gloves, dust masks, respirators, fire retardant clothing; evidence of three items of PPE is required.

1.3 Describe failure to correctly use hearing and respiratory protection in terms of consequences.

Range evidence of two consequences of inadequate hearing protection is required.

1.4 Describe responses required to site alarm systems.

Range alarms may include but are not limited to – evacuation, fire, gas detection, all clear, muster, emergency shutdown procedure.

1.5 Describe requirements for the use of personnel work safety systems.

Range 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 personnel safety systems is required.

Outcome 2

Describe responsibilities under the Health and Safety at Work Act in an energy and chemical plant.

Performance criteria

2.1 Describe employee responsibilities in an energy and chemical plant in terms of the Health and Safety at Work Act.

Range evidence of three responsibilities is required.

2.2 Describe employer responsibilities in an energy and chemical plant in terms of the Health and Safety at Work Act.

Range evidence of five responsibilities is required.

2.3 Describe potential penalties for breach of these responsibilities in terms of the Health and Safety at Work Act.

2.4 Describe codes of practice relevant to the plant in terms of the Act.

Range evidence of two codes of practice is required.

Outcome 3

Maintain and monitor personnel safety equipment in an energy and chemical plant.

Range personnel safety equipment may include but is not limited to – first aid stations, eyewash, safety showers, fire-fighting equipment, gas detection monitors, breathing equipment;
evidence of two items of safety equipment is required.

Performance criteria

3.1 Maintain condition of plant personnel safety equipment.

3.2 Document and report results of monitoring safety equipment.

Outcome 4

Identify and comply with PPE requirements in an energy and chemical plant.

Performance criteria

4.1 Use PPE.

4.2 Maintain PPE.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 June 2005	31 December 2014
Rollover and Revision	2	25 July 2006	31 December 2014
Review	3	22 May 2009	31 December 2016
Review	4	24 October 2014	31 December 2022
Review	5	27 February 2020	N/A

Consent and Moderation Requirements (CMR) reference

0079

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

Comments on this unit standard

Please contact the Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.