

Title	Apply hazard management and risk assessment procedures used in an energy and chemical plant		
Level	3	Credits	10

Purpose	<p>This entry-level unit standard is 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 hazards found and processes for dealing with them, and chemicals found and processes for dealing with them; store and handle chemicals used; and apply risk assessment procedures used, in an energy and chemical plant.</p>
----------------	--

Classification	Energy and Chemical Plant > Operation of Energy and Chemical Plant
-----------------------	--

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 Assessment conditions
All assessment must be carried out at an energy or chemical site.
- 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.

Hazard – the meaning used in section 2 of the HSE Act.

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 Legislation relevant to this unit standard includes but is not limited to – Hazardous Substances and New Organisms Act 1996, Health and Safety in Employment Act 1992, Resource Management Act 1991.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of hazards found in an energy and chemical plant and processes for dealing with them.

Performance criteria

- 1.1 Sources of hazards found in an energy and chemical plant are identified and explained in terms of their impact on workers.
- Range sources include but are not limited to – housekeeping, weather, process conditions, interactions with other workers; Impacts include but are not limited to - health effects, quality of life, financial, employment.
- 1.2 Hazards found in an energy and chemical plant are identified and described in terms of their types.
- Range evidence is required of three different hazards found in the candidate's workplace; an example is required of each type of hazard (eliminate, isolate, minimise).
- 1.3 Process for eliminating, isolating or minimising hazards in an energy and chemical plant is described in terms of hazard control.
- Range evidence is required of the process used to eliminate, isolate and minimise hazards in the candidate's workplace.

Outcome 2

Demonstrate knowledge of chemicals found in an energy and chemical plant and processes for dealing with them.

Performance criteria

- 2.1 Chemicals found in an energy and chemical plant are identified in terms of their use.
- Range evidence is required of three different chemicals used in the candidate's workplace.

2.2 Safety information relating to storage and handling of chemicals found in an energy and chemical plant is identified and described in terms of type and information provided.

Range safety information includes but is not limited to – HAZCHEM code warning statements, chemical data sheets, safety data sheets, container labels, manufacturer’s instructions, first aid information, personal protective equipment (PPE) instructions.

2.3 Hazards related to handling chemicals found in an energy and chemical plant are identified and described in terms of the procedures used to maintain safety.

2.4 Procedures relating to chemical spills are identified and described in terms of methods and disposal and reporting requirements.

Outcome 3

Store and handle chemicals used in an energy and chemical plant.

Performance criteria

3.1 Storage of chemicals used in an energy and chemical plant is explained in terms of containers, designated storage areas and segregation requirements.

Range evidence is required of storage and segregation techniques used in the candidate’s workplace.

3.2 Chemicals are received, stored and handled in accordance with organisational requirements.

3.3 All plant documentation related to chemical use and storage is completed in accordance with organisational requirements.

Outcome 4

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

Performance criteria

4.1 Risk assessment procedures are applied in accordance with organisational requirements.

4.2 All plant documentation related to the risk assessment process is completed in accordance with organisational requirements.

Replacement information	This unit standard was replaced by unit standard 32107.
--------------------------------	---

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 2022

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

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