

Title	Demonstrate knowledge of working in gas contaminated environments in plumbing, gasfitting, or drainlaying		
Level	2	Credits	3

Purpose	<p>This unit standard is for people who work, or intend to work, in the plumbing, gasfitting, or drainlaying industries.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of the properties and hazards of gas types that may contaminate plumbing, gasfitting, or drainlaying environments; and, describe the precautions and actions to be taken when working in the presence of uncontained gas types for plumbing, gasfitting, or drainlaying.</p>
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Classification	Plumbing, Gasfitting and Drainlaying > Core Plumbing, Gasfitting, and Drainlaying
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Available grade	Achieved
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Guidance Information

- 1 Legislation and the standard relevant to this unit standard include but are not limited to:
Health and Safety at Work Act 2015;
AS/NZS 2865:2001 *Safe working in a confined space*, available at <http://www.standards.govt.nz/>;
and all subsequent amendments and replacements.
- 2 Range
Gas may include but is not limited to – ground and sewer gases and fumes, exhaust fumes.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the properties and hazards of gas types that may contaminate plumbing, gasfitting, or drainlaying environments.

Performance criteria

- 1.1 Identify the types of gasses that can commonly present hazards in a plumbing, gasfitting or drainlaying work environment.
- Range includes but is not limited to LPG, Natural Gas, methane, carbon monoxide, oxy-acetylene, carbon dioxide.
- 1.2 Describe the main properties of the gases.
- Range composition, visibility, flammability, concentration, toxicity, relative density, smell, ignition temperature, burning.
- 1.3 Describe three dangers of working where gas is present.

Outcome 2

Describe the precautions and actions to be taken when working in the presence of uncontained gas types for plumbing, gasfitting, or drainlaying.

Performance criteria

- 2.1 Describe the precautions to be taken to prevent fire and to protect personnel in terms of relevant legislation and NZS 2865:2001.
- Range flammable mixture, sources of ignition, toxicity, need for ventilation.
- 2.2 Describe the actions to eliminate sources of ignition in terms of relevant legislation and NZS 2865:2001.
- Range tools, stray electric currents, naked flames and smoking, electrical equipment, static electricity, electric cables, vehicles, machinery.
- 2.3 Describe the practical actions to be taken in the event of a gas fire are described.
- Range deciding a course of action, extinguishing a fire, allowing gas to continue to burn off, isolating a gas supply.
- 2.4 Describe the practical actions to be taken in the event of exposure to toxic gases in accordance with relevant legislation and NZS 2865:2001.
- 2.5 Describe notification requirements to inform others of the gas incursion.
- Range others in or surrounding the work site who may become affected, emergency services, regulatory bodies.

Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 October 2007	31 December 2022
Review	2	15 March 2012	31 December 2022
Review	3	28 September 2017	N/A

Consent and Moderation Requirements (CMR) reference	0003
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.