Title	Demonstrate knowledge of hazards associated with confined spaces		
Level	3	Credits	4

Purpose	This unit standard is for people working in confined spaces.  People credited with this unit standard are able to demonstrate knowledge of confined spaces, and their permit notification and implementation requirements; identify control measures to eliminate, isolate, and minimise the risk of hazards in confined spaces; demonstrate knowledge of monitoring and confined space testing requirements; and describe the responsibilities and duties of people entering confined spaces or conducting observation duties for confined spaces.	
Classification	Occupational Health and Safety > Occupational Health and Safety Practice	

	Carety Fraction
Available grade	Achieved

Available grade	Achieved
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### **Guidance Information**

#### 1 References

Legislative requirements in this unit standard include – Health and Safety at Work Act 2015; Resource Management Act 1991; local body regulations; applicable Approved Codes of Practice including AS 2865-2009, Confined spaces, available at www.saiglobal.com; and any subsequent amendments and replacements.

#### 2 **Definitions**

Confined spaces – an enclosed or partially enclosed space that is not intended or designed primarily for human occupancy, within which there is a risk of one or more of the following:

- (a) An oxygen concentration outside the safe oxygen range.
- (b) A concentration of airborne contaminant that may cause impairment, loss of consciousness or asphyxiation.
- (c) A concentration of flammable airborne contaminant that may cause injury from fire or explosion.
- (d) Engulfment in a stored free-flowing solid or a rising level of liquid that may cause suffocation or drowning.

Organisational requirements – instructions to candidates on policies and procedures which are documented in memo or manual format. These requirements include but are not limited to – site-specific requirements and any quality management requirements.

# Outcomes and performance criteria

#### **Outcome 1**

Demonstrate knowledge of confined spaces, and their permit notification and implementation requirements.

### Performance criteria

- 1.1 A confined space is defined in terms of its atmosphere, intended use, entry and exit features, and examples of types of confined spaces to be found in a specified workplace.
- 1.2 Work permits related to confined space work are identified in terms of type and organisational requirements.

Range work permits include but are not limited to – entry, gas, heat stress, hot work, isolation.

1.3 Notification for associated work is identified in terms of type and organisational requirements.

Range associated work includes but is not limited to – confined space, scaffolding, use of compressed air breathing equipment.

1.4 Supporting documents that outline confined space requirements and system supports are identified in terms of type and requirement.

Range

supporting documents include but are not limited to – hazard identification/risk assessment procedures and forms, entry procedures and forms, work permit procedures and forms, gas monitoring procedures and forms, emergency rescue procedures and plans, site evacuation plans.

### Outcome 2

Identify control measures to eliminate, isolate, and minimise the risk of hazards in confined spaces.

### Performance criteria

2.1 Atmospheric hazards associated with the confined space environment are identified in terms of organisational requirements.

Range

atmospheric hazards include but are not limited to – toxic gases, flammable liquids, vapours, dust, fire, explosion, oxygen depletion or enrichment, other chemicals, toxic fumes, hazardous fumes from machinery, degree of cleanliness, amount of residual contents.

2.2 Other hazards that may arise due to the nature of work activities within the confined space are identified in terms of organisational requirements.

Range

other hazards include but are not limited to – physical falls, slips, noise, electrocution, impact, entrapment, engulfment, oxygen depletion or enrichment, toxic formation, heat stress, hypothermia, exhaustion, disturbance of residual contents, housekeeping standards.

2.3 Hazards that may arise due to the changes in external conditions are identified in terms of organisational requirements.

Range

hazards include but are not limited to – blockage of entry or exit points, changes in ventilation, changes in weather, external activities and emergencies.

2.4 Hazard identification and risk assessment procedures are identified in terms of health and safety and organisational requirements.

#### Outcome 3

Demonstrate knowledge of monitoring and confined space testing requirements.

### Performance criteria

- 3.1 Continuous communication channels are identified in terms of work activity, environment and emergency procedures.
- 3.2 Continuous visual monitoring is defined in terms of the meaning of continuous and the practicable application benefits and limitations of visual monitoring within confined spaces.
- 3.3 Audio monitoring is defined in terms of when it may be used to complement visual monitoring within confined spaces.
- 3.4 Pre-entry and periodic testing requirements are identified in terms of risk assessment procedures, frequency and type, and health and safety and organisational requirements.

Range testing requirements include but are not limited to – gas levels, temperature.

#### Outcome 4

Describe the responsibilities and duties of people entering confined spaces or conducting observation duties for confined spaces.

### Performance criteria

4.1 Responsibilities and duties of people entering confined spaces are described in terms of a specific workplace and organisational requirements.

Range

responsibilities and duties include but are not limited to – ensuring safety of self and others, communication requirements, entry and exit procedures, emergency evacuation, maintenance of hazard control measures.

4.2 Responsibilities and duties for a confined space entry safety observer are described in terms of health and safety and organisational requirements.

Range

responsibilities and duties include but are not limited to — monitoring work and adjacent areas environments, remaining at post to form continual communication link and life support, maintaining and checking communication systems, ensuring required emergency response equipment is present, raising alarm for abnormalities, effecting a non-entry rescue, maintaining records of tests and entry, performing no other duties.

- 4.3 Record keeping and document control are described in terms of health and safety and organisational requirements.
- 4.4 Specific responsibilities and duties of the safety observer, in potential emergency situations, are described in terms of organisational requirements.

Range

responsibilities and duties include but are not limited to – ensuring own safety, preventing unauthorised rescue entry, raising alarm for emergency response, effecting non-entry rescue, providing first aid and CPR assistance.

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	31 July 2001	31 December 2012
Revision	2	16 May 2005	31 December 2012
Review	3	25 May 2007	31 December 2012
Rollover and Revision	4	17 June 2011	31 December 2013
Revision	5	8 December 2011	31 December 2018
Revision	5	22 February 2012	31 December 2018
Review	6	21 March 2013	31 December 2018
Rollover and Revision	7	22 May 2014	31 December 2018
Rollover and Revision	8	19 January 2017	N/A
Rollover and Revision	9	22 August 2019	N/A

Consent and Moderation Requirements (CMR) reference	0121
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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>.

## Comments on this unit standard

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