Title	**Stabilise a gas emergency site and deal with a gas-filled building**		
Level	**4**	**Credits**	**20**

Purpose	People credited with this unit standard are able to: demonstrate knowledge of documentation, company procedures, hazards, and equipment for stabilising a gas emergency site and dealing with a gas-filled building; stabilise a gas emergency site and safeguard life and property; and complete reporting and documentation.

Classification	Gas Industry > Gas Network Operations

Available grade	Achieved

Pre-requisites	Unit 12503, *Respond to, locate and classify gas escapes in a gas network*, or equivalent skills and knowledge.

Guidance Information

1 This unit standard is intended for, but not limited to, assessment by simulation, attestation, and work records. The range statements relate to enterprise specific equipment, procedures, and processes.

2 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable manufacturer's specifications, company procedures and legislative requirements. This includes the knowledge and use of suitable tools and equipment.

3 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of:
Health and Safety at Work Act 2015;
Gas Act 1992;
Gas (Safety and Measurement) Regulations 2010;
AS/NZS 4645.1:2018 *Gas distribution networks – Network management;*
AS/NZS 4645.2:2018 *Gas distribution networks – Steel pipe systems*;
AS/NZS 4645.3:2018 *Gas distribution networks – Plastics pipe systems*;
and any subsequent amendments and replacements.

4 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

5 References
Australian/New Zealand standards (AS/NZS) may be found at www.standards.org.au;
New Zealand standards (NZS) may be found at www.standards.govt.nz.

6 Definitions
Company procedures mean the documented methods for performing work activities, and include health and safety, operational, environmental, and quality management requirements. They may refer to legislation, regulations, guidelines, standard operating procedures, manuals, codes of practice, or policy statements.
Coordinated Incident Management System (CIMS) is a proactive incident management framework that systematically manages incidents regardless of size, hazard, and complexity.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of documentation, company procedures, hazards, and equipment for stabilising a gas emergency site and dealing with a gas-filled building.

Performance criteria

1.1 Documentation and company procedures for stabilising a gas emergency site and dealing with a gas-filled building are located and interpreted.

Range may include – emergency response plan, work instructions, network standard, incident management procedure, safe working procedures, job hazard analysis, risk assessments.

1.2 Criteria for gas emergencies is described.

Range fire, explosion, supply interruption, property damage, gas in buildings, notifiable event.

1.3 Emergency management roles and responsibilities are described.

Range site controller, emergency controller, CIMS, emergency services, civil defence.

1.4 Potential safety hazards and controls are described.

Range hazards may include – uncontrolled live gas, explosive atmosphere, pneumatic release, working in excavations, other utilities, vehicles, general public, ignition source, wind direction; controls may include – signage, exclusion zone, personal protective equipment, safe access and egress, temporary traffic control, gas detection equipment, atmosphere monitoring, venting, emergency services.

1.5 Explosive ranges for gas in a building are described.

Range natural gas, LPG.

1.6 Requirements to evacuate and re-enter a gas filled building are described.

Range oxygen deficient atmosphere, gas concentration evacuation level, fire.

1.7 Considerations for surveying a building to obtain gas concentration readings are described.

Range high level positions, low level positions, utility spaces, air ventilation system, ignition sources, vents, ducts, gas specific gravity, odourant levels, monitoring frequency, external areas, adjacent buildings.

1.8 Considerations for accessing a building to obtain gas concentration readings are described.

Range emergency services, building owner or occupier, warden, authority, forced entry.

1.9 Considerations for ventilating a gas filled building are described.

Range gas specific gravity, weather conditions, wind direction, adjacent buildings, ignition sources, vent path, forced ventilation.

1.10 Requirements of tools and equipment used for stabilising a gas emergency site and dealing with a gas-filled building are described.

Range equipment includes – breathing apparatus, firefighting equipment, gas detector, communications, personal protective equipment; requirements may include – specification, certification, calibration, intrinsically safe.

Outcome 2

Stabilise a gas emergency site and safeguard life and property.

Performance criteria

2.1 Emergency management roles and responsibilities are established and communicated.

Range roles may include – emergency controller, site controller, CIMS civil defence, emergency services.

2.2 Safety hazards are identified and controlled.

Range risks may include –, explosive atmosphere, working in excavations, uncontrolled live gas, pneumatic release, other utilities, vehicles, general public, ignition source, wind direction; controls may include – signage, exclusion zone, personal protective equipment, safe access and egress, temporary traffic control, gas detection equipment, atmosphere monitoring, venting, emergency services.

2.3 Information relating to the emergency situation is communicated.

Range may include – escalation, additional resources, other utilities, emergency services, requests or directives from external controllers, public, media, WorkSafe.

2.4 Assistance to gain access to the site or building is requested.

Range may include – emergency services, building owner or occupier, warden, authority of personnel, forced entry.

2.5 Site or building is surveyed to obtain gas concentration readings and are recorded.

Range may include – high level positions, low level positions, utility spaces, air ventilation system, ignition sources, vents, ducts, monitoring frequency, external areas, adjacent buildings.

2.6 Findings about gas readings is communicated.

2.7 Requirement to evacuate site or building are confirmed.

Range may include – oxygen deficient atmosphere, gas concentration evacuation level, fire.

2.8 Personnel are evacuated from site or building.

Range safe route, assembly area, roll call, reporting.

2.9 Site or building is made safe, ventilated, and confirmed as safe for re-entry.

Range ventilation method may include – forced, natural.

Outcome 3

Complete reporting and documentation.

Performance criteria

3.1 Records and documents are completed and processed, and information is communicated to internal or external parties as required.

Range may include – incident report, event log, gas monitoring records, WorkSafe notification, completion notice, additional work.

Planned review date	31 December 2025

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 October 2002	31 December 2018
Review	2	20 November 2006	31 December 2020
Review	3	17 August 2017	31 December 2023
Revision	4	30 August 2018	31 December 2023
Review	5	27 May 2021	N/A

Consent and Moderation Requirements (CMR) reference	0014

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

Comments on this unit standard

Please contact MITO New Zealand Incorporated info@mito.org.nz if you wish to suggest changes to the content of this unit standard.