Title	**Isolate and disconnect a low-capacity gas measurement system (GMS) in a gas network**		
Level	**3**	**Credits**	**4**

Purpose	People credited with this unit standard are able to: demonstrate knowledge of documentation, company procedures and hazards when isolating and disconnecting a low-capacity GMS in a gas network and isolate and disconnect a low-capacity GMS.

Classification	Gas Industry > Gas Measurement

Available grade	Achieved

Guidance Information

1 This unit standard is intended for, but not limited to, workplace assessment. 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 the:
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*;
NZS 5259: 2015 *Gas measurement*;
GIP001 *Gas Industry Disconnection and Reconnection Protocol;*
and any subsequent amendments and replacements.

4 References
Australian/New Zealand standards (AS/NZS) may be found at www.standards.govt.nz;
Gas Industry Protocols (GIP) may be found by contacting the Gas Association of New Zealand www.gasnz.org.nz.

5 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.

6 Definitions

Company procedures refers to 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.
GMS refers to a gas measurement system.
Low-capacity gas measurement system includes filtration, pressure control, pressure protection and meters up to and including 16 cubic metres per hour (G10).
Let-by refers to a situation where a Service Valve in the off position (closed) continues to pass gas to the Gas Installation
Service Valve refers to the valve on the Network supply prior to the GMS.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of documentation, company procedures, and hazards when isolating and disconnecting a low-capacity GMS in a gas network.

Performance criteria

1.1 Documentation and company procedures for isolating and disconnecting a GMS are located and interpreted.

Range may include – company procedures, safe work procedure, operating procedure, maintenance procedure, work instruction, job hazard analysis, job risk assessment.

1.2 Documentation and instructions for a specified job are confirmed.

Range may include – job card, site location, meter location, consents, meter reading, customer liaison.

1.3 Potential safety hazards and controls are described.

Range hazards may include – public, animals, gas escape, confined spaces, working at heights, electrical voltage, service riser corrosion;
controls may include – signage, barriers, gas detection, personal protective equipment, safe access and egress, continuity bond, service riser condition inspection.
evidence of four hazards and controls are required.

1.4 Types and reasons for GMS disconnections are described.

Range types – temporary, transitional, permanent.

1.5 Information to be displayed on GMS status tags is identified.

1.6 The steps taken to isolate and disconnect a low-capacity GMS are described.

Range meter identification, consumer liaison, service valve isolation, let-by test, secure outlet connection, status tag, meter reading

1.7 Action to be taken in the event of a failed let-by test is described.

Outcome 2

Isolate and disconnect a low-capacity GMS.

Range types may include – temporary, transitional;
evidence of one GMS isolation and disconnection is required.

Performance criteria

2.1 Safety and environmental hazards are identified and controlled.

Range hazards may include – public, animals, gas escape, confined spaces, working at heights, electrical voltage, service riser corrosion;
controls may include – signage, barriers, gas detection, personal protective equipment, safe access and egress, continuity bonds, service riser condition inspection.

2.2 Equipment and materials for isolating and disconnecting GMS are prepared and positioned.

Range documentation, personnel, personal protective equipment, tools, materials, equipment.

2.3 GMS is isolated and disconnected.

Range meter identification, service valve isolation, let-by test, secure outlet connection, status tag, meter reading;
may include – consumer liaison, retailer liaison.

2.4 GMS isolation and disconnection records are completed and processed to internal and external parties.

Range may include – meter reading, 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	24 June 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.