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| Title | Carry out flow stopping operations using squeeze-offs on a gas pipeline | | |
| Level | 4 | Credits | 10 |

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| Purpose | People credited with this unit standard are able to: demonstrate knowledge of documents, company procedures, hazards and equipment for carrying out a flow stopping operation on a gas pipeline; prepare to install flow stopping equipment on a gas pipeline; install and use flow stopping equipment and fittings on a gas pipeline; and complete reporting and documentation. |
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| Classification | Gas Industry > Gas Network Construction |
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| Available grade | Achieved |
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Guidance Information

- 1 This unit standard is intended for, but is 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:
Health and Safety at Work Act 2015;
Resource Management Act 1991;
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 References
Australian standards (AS) may be found at www.standards.org.au;
Australian/New Zealand standards (AS/NZS) may be found at www.standards.govt.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 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.

Flow stopping operation refers to the double block and bleed method using squeeze offs. The principles of flow stopping covered in this unit standard can be applied to flow stopping operations using proprietary bag stop or stopple equipment where personnel have demonstrated competence in the use of such equipment.

7 Assessment may be undertaken in real or simulated situations and must be performed on a pipeline that has a sufficient supply of gas (or air if simulated) to demonstrate a flow stop operation.

8 Assessment of this unit standard excludes the work for which the flow stopping operation was required.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of documents, company procedures, hazards and equipment for carrying out a flow stopping operation on a gas pipeline.

Performance criteria

1.1 Documentation and company procedures for carrying out a flow stopping operation and use of flow stopping equipment are located and interpreted.

Range may include – company standard, safe work procedure, operating procedure, work instruction, equipment operating manual, job hazard analysis, job risk assessment.

1.2 Documentation and instructions for a specified job are obtained.

Range may include – job card, site location, network drawings, non-routine operating procedure, utility plans, network pressure monitoring, permit, consents, easement conditions.

1.3 Potential environmental and safety hazards and controls associated with a flow stopping operation are described.

Range hazards may include – gas release, other utilities, excavations, static electricity, vehicles and public;
controls may include – signage, barriers, personal protective equipment, safe access and egress, temporary traffic control, gas detection, continuity bond, safety observer;
evidence of four hazards and controls are required.

1.4 Types and function of equipment used for carrying out a flow stopping operation are described.

Range squeeze-off, bypass, purge rider, purge point, vent stack, pressure monitoring.

1.5 Potential hazards of incorrect application and operation of flow stopping equipment and procedures are described.

Outcome 2

Prepare to install flow stopping equipment on a gas pipeline.

Performance criteria

2.1 Safety and environmental hazards are identified and controlled.

2.2 Flow stopping equipment, fittings, and pipe section are prepared and positioned.

Range squeeze-offs, bypass, purge rider, purge point, vent stack, pressure monitoring.

Outcome 3

Install and use flow stopping equipment and fittings on a gas pipeline.

Performance criteria

3.1 Bypass and/or purge rider are commissioned.

3.2 Squeeze off or flow stopping operation is applied while pressures and flow conditions are monitored.

3.3 Section of pipe being isolated is depressurised and the integrity of flow stopping equipment is checked.

3.4 Pipe connection or disconnection is carried out.

3.5 Flow stopping equipment is removed and leak testing of final joints is carried out.

3.6 Polyethylene pipe is re-rounded, if required.

Outcome 4

Complete reporting and documentation.

Performance criteria

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

Range may include – job card, as-built records, completion notice, pressure monitoring report, additional work.

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| Replacement information | This unit standard replaced unit standard 10974, unit standard 10986 and unit standard 25608. |
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| Planned review date | 31 December 2025 |
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Status information and last date for assessment for superseded versions

| Process | Version | Date | Last Date for Assessment |
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| Registration | 1 | 17 August 2017 | 31 December 2023 |
| Review | 2 | 27 May 2021 | N/A |

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| Consent and Moderation Requirements (CMR) reference | 0014 |
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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 MITO New Zealand Incorporated info@mito.org.nz if you wish to suggest changes to the content of this unit standard.