

Title	Access a gas pipe inside a casing pipe in a gas network		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to demonstrate knowledge of company procedures, documentation, hazards and equipment for accessing a casing pipe; prepare equipment to access a gas pipe inside a casing pipe; access a gas pipe inside a casing pipe; 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;
- 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
Casing pipe refers to a cast iron, steel or PVC (polyvinyl chloride) pipe that has a gas main or service inserted inside it.

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.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of company procedures, documentation, hazards and equipment for accessing a casing pipe.

Performance criteria

- 1.1 Company procedures for accessing a gas pipe inside a casing pipe are located and interpreted.
- Range may include – network standard, standard operating procedure, safe work procedure, work instruction, job hazard analysis, job risk assessment.
- 1.2 Documentation and instructions for a specified job are obtained.
- Range may include – job card, site location, hazard identification, utility plans, permit, network plans, easement conditions.
- 1.3 Equipment and materials for accessing a gas pipe inside a casing pipe are described in terms of function.
- Range may include – drill – pneumatic, hand; circumferential cutters, axial cutters, gas detection equipment, continuity bond, earthing equipment, fire extinguisher, anti-shear sleeve, flexible couplings, expanding foam, sealing tape, pipe and cable locators.
- 1.4 The general requirements for each step of accessing a gas pipe inside a casing pipe are described.
- Range casing pipe identification and preparation, confirmation of annulus contents and space, cutting casing pipe, removal of casing pipe section, centralising the gas pipe, sealing of casing pipe.
- 1.5 Potential environmental and safety hazards and their controls associated with accessing a gas pipe inside a casing pipe are described.
- Range hazards may include – gas release, excavations, other utilities, confined spaces, vehicles and public, electrical, contaminants, ignition source;
controls may include – gas detection equipment, safe access and egress, temporary traffic control, signage, barriers, personal protective equipment, continuity bond, earthing, waste removal and disposal, fire extinguisher, fire blanket;
evidence of four hazards and controls are required.

- 1.6 Potential hazards of incorrect application and operation of equipment and procedures for accessing a gas pipe inside a casing pipe are identified.

Outcome 2

Prepare equipment to access a gas pipe inside a casing pipe.

Performance criteria

- 2.1 Hazards for the specified job are identified and controlled.
- 2.2 Equipment and materials for breaking into a casing pipe are prepared and positioned.

Range may include – circumferential cutters, axial cutters, gas detection equipment, continuity bond, earthing equipment, fire extinguisher, anti-shear sleeve, flexible couplings, expanding foam, sealing tape, pipe and cable locators, drill – pneumatic, hand.

Outcome 3

Access a gas pipe inside a casing pipe.

Performance criteria

- 3.1 Casing pipe is identified as the correct pipe and prepared.

Range identification may include – operating pipe and cable locators, validation of other utility assets, excavating for pipe features or fittings;
preparation of pipe may include – coating removal, cleaning, marking.

- 3.2 Exploratory hole is made in casing pipe and contents of casing pipe and their position are confirmed.

Range may include – inserted main, inserted service, other utility, empty annulus, available annulus.

- 3.4 Remedial action is taken if casing pipe is the wrong pipe, if required.

Range may include – temporary repair, permanent repair, reporting to network owner or other utility.

- 3.5 Length of casing pipe to be removed is identified and marked.

- 3.6 Casing pipe is cut and removed.

- 3.7 Gas pipe is centralised.

- 3.8 Casing pipe ends are sealed.

Outcome 4

Complete reporting and documentation.

Performance criteria

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

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

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
Registration	1	27 May 2021	N/A

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.