

Title	Pig a gas pipeline		
Level	4	Credits	6

Purpose	People credited with this unit standard are able to: locate and identify documentation, company procedures, hazards and equipment for pigging a gas pipeline; load, launch and track a pig; receive and unload a pig from 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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Prerequisites	Unit 30377, <i>Demonstrate knowledge of pigging on a gas network pipeline</i> , or equivalent skills and knowledge.
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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 Performance of the outcomes of this unit standard must comply with the following:
 - Health and Safety at Work Act 2015;
 - Health and Safety in Employment (Pipelines) Regulations 1999;
 - Gas Act 1992;
 - Gas (Safety and Measurement) Regulations 2010;
 - Resource Management Act 1991;
 - Hazardous Substances and New Organisms Act 1996;
 - AS/NZS 2885.5:2012 *Pipelines – Gas and liquid petroleum Part 5: Field pressure testing*;
 - 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*;
 - AS 2885.3:2012 *Pipelines – Gas and liquid petroleum operation and maintenance*;
 - 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.
Pigs are devices for insertion into pipelines for the purpose of cleaning or inspecting the lines or separating products.

Outcomes and performance criteria

Outcome 1

Locate and identify documentation, company procedures, hazards and equipment for pigging a gas pipeline.

Performance criteria

- 1.1 Documentation and company procedures for pigging a gas pipeline are located and interpreted.
- Range may include – standard operating procedure, safe work procedure, job risk assessment, job hazard analysis.
- 1.2 Documentation for a specified job is obtained.
- Range may include – job card, permits, site location, station drawings, non-routine procedure, work instructions, consents, easement conditions.
- 1.3 Potential hazards associated with the incorrect application and operation of equipment and procedures are described.
- Range hazards may include – stuck pig, pipeline blockage, reduced flow rates, process interruption, poor data capture.
- 1.4 Resource requirements are located and prepared.
- Range may include – pigs, timer boxes, pig tracking equipment, inert gas supply, lifting equipment, plant, tools, personal protective equipment, communication equipment, waste disposal equipment.

Outcome 2

Load, launch and track a pig.

Performance criteria

2.1 Safety and environmental hazards are identified and controlled.

Range hazards may include – gas atmosphere, gas venting, noise, waste products, spontaneously combustible materials, manual lifting and handling, stuck pig, sudden energy release; controls may include – personal protective equipment, gas detection, pressure monitoring, waste containment and disposal, lifting and loading equipment, pig tracking.

2.2 The pig is loaded.

Range may include – pig preparation, pig trap isolations, valve positions, isolations, venting, lifting and loading equipment.

2.3 Pig launching system checks are made.

Range may include – pressure conditions, isolations, valve positions, pressure differential, flow rate.

2.4 The pig is launched through application of the correct valve operating sequence.

2.5 The pig is tracked.

Range may include – pressure monitoring, above ground pipework, vent pipe, listening point, aerial crossing, acoustic listening device, timer box.

2.6 Communication with relevant personnel is maintained during pig launching and tracking operation.

Outcome 3

Receive and unload a pig from a gas pipeline.

Performance criteria

3.1 Pig receiving system checks are made.

Range may include – pressure conditions, isolations, valve positions, flow rate, catchment equipment, venting.

3.2 The pig is received.

3.3 Pig unloading is carried out.

Range may include – pressure differential, valve positions, pig trap isolations, venting, waste catchment, lifting and unloading equipment, combustible material.

- 3.4 Residual materials are disposed of according to regulatory consents and company procedures.

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.

Range may include – job card, pig condition report, pipeline condition report, description of contaminants, photographs, completion notice, additional work required.

Replacement information	This unit standard replaced unit standard 9551 and unit standard 23087.
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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
Registration	1	17 August 2017	31 December 2023
Review	2	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.