

<b>Title</b>	<b>Demonstrate knowledge of pipe bursting</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	People credited with unit standard are able to demonstrate knowledge of pipe bursting.
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<b>Classification</b>	Infrastructure Works > Pipeline Construction and Maintenance
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation and references relevant to this unit standard include: Resource Management Act 1991; Local Government Act 2002; Health and Safety at Work Act 2015, and subsequent amendments; Health and Safety in Employment (Pipelines) Regulations 1999; *Excavation Safety – Good Practice Guidelines 2016*, available from <http://www.worksafe.govt.nz/worksafe/information-guidance/all-guidance-items/excavation-safety-gpg>; *National Code of Practice for Utilities' Access to the Transport Corridors*, Wellington: NZ Utilities Advisory Group, available from <http://www.nzuag.org.nz/national-code/>; Local and or territorial authority requirements.
- 2 Definitions
 

*Maintenance* refers to pre-start checks and upkeep tasks required of the operator and does not include repairs.

*Organisational procedures* – instructions to staff, and procedures which are documented in memo or manual format and are available in the workplace. These requirements include but are not limited to – site specific requirements, manufacturers' specifications, product quality specifications, and legislative or regulatory requirements.

*Pipe bursting* is a trenchless method for replacement of buried pipelines (such as sewer, water, or natural gas pipes) with a new pipe of the same or larger diameter.

### Outcomes and performance criteria

#### Outcome 1

Demonstrate knowledge of pipe bursting.

#### Performance criteria

- 1.1 Pipe bursting is described in terms of purpose and reasons for choosing over other methods of pipe replacement.

- 1.2 Types of host pipe material are identified in terms of size and length.
- Range may include but is not limited to – cast iron, ductile iron, reinforced concrete, un-reinforced concrete, plastics, earthenware, vitrified clay, steel, asbestos cement; evidence for at least three is required.
- 1.3 Host pipe is described in terms of potential condition and effects on suitability for bursting.
- Range general condition, previous repairs, displaced joints, bends, change of material, encasement of host pipe, depth of installation.
- 1.4 Machinery and equipment for pipe bursting is described in terms of function and suitability for purpose, criteria for selection, and care and maintenance requirements.
- Range static, hydraulic or pneumatic, expander, splitter, lubricants, burst head.
- 1.5 Ground conditions that affect pipe bursting are described in terms of organisational procedures for their management.
- Range displaceable soil, water table, non-cohesive soil, soil strength.
- 1.6 Attributes that affect adjacent utility services and other structures are described in terms of organisational procedures for protecting them from the bursting process.
- Range may include but is not limited to – ground movement, vibration, settlement.
- 1.7 The process of pipe replacement using pipe bursting is described in accordance with organisational procedures.

**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	16 March 2017	31 December 2023
Review	2	26 August 2021	31 December 2023

<b>Consent and Moderation Requirements (CMR) reference</b>	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.