

Title	Maintain and install services for an underground operation		
Level	3	Credits	15

Purpose	People credited with this unit standard are able to: check task and equipment requirements before going underground; maintain ventilation services; maintain water services; maintain compressed air services; maintain strata support services; deliver and store electrical equipment and cables; and supply other materials and equipment, and complete documentation, in an underground operation.
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Classification	Extractive Industries > Underground Extraction
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Available grade	Achieved
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Prerequisites	Unit 7146, <i>Demonstrate basic knowledge and ability required to work in an underground operation</i> , or demonstrate equivalent knowledge and skills.
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Guidance Information

- 1 Performance of the outcomes of this unit standard must comply with the following:
Health and Safety at Work Act 2015 (HSW);
Health and Safety at Work (General Risk and Workplace Management) Regulations 2016;
Health and Safety at Work (Worker Engagement, Participation, and Representation) Regulations 2016;
Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016;
approved codes of practice issued pursuant to the HSW Act.
- 2 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.
- 3 **Definition**
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.
- 4 An *underground operation* includes extractive or tunnelling operations.
- 5 This unit standard is intended for workplace assessment.

- 6 The candidate will be required to assess all working situations for personal safety, and safety of others and equipment beyond the instructions received.
- 7 All practical activities will be by direction or under supervision.

Outcomes and performance criteria

Outcome 1

Check task and equipment requirements before going underground.

Performance criteria

- 1.1 Task and equipment requirements and location for the shift are confirmed in accordance with company procedures.
- 1.2 Equipment and materials for carrying out tasks are checked for availability and readiness for use.
- 1.3 Additional equipment and materials are sourced and/or arrangements for repairing are made where required in accordance with task requirements.

Outcome 2

Maintain ventilation services in an underground operation.

Performance criteria

- 2.1 Ventilation control devices (VCDs) are installed, extended, or repaired in accordance with received and verified instructions.

Range may include but is not limited to – temporary and permanent stoppings, brattice leads, ducting, seals, doors, air crossings, strength rating.
- 2.2 Auxiliary/secondary ventilation fans are installed in accordance with received and verified instructions.

Range may include but is not limited to – approvals, location, protection from damage, earthing, cables, ducting, gas chamber, dust filter, silencer, sensor, interlock.

Outcome 3

Maintain water services in an underground operation.

Performance criteria

- 3.1 Dewatering pumps are installed and maintained in accordance with received and verified instructions.

- 3.2 Pump discharge pipes are installed and maintained in accordance with received and verified instructions.
- 3.3 Service water pipes and hoses are installed and maintained in accordance with received and verified instructions.

Outcome 4

Maintain compressed air services in an underground operation.

Performance criteria

- 4.1 Compressed air services are installed and maintained in accordance with received and verified instructions.

Outcome 5

Maintain strata support services in an underground operation.

Performance criteria

- 5.1 Strata support materials are supplied and stored in accordance with received and verified instructions.

Outcome 6

Deliver and store electrical equipment and cables.

Performance criteria

- 6.1 Electrical equipment is delivered and stored in accordance with received and verified instructions.
- 6.2 Cables are delivered and stored in accordance with received and verified instructions.

Outcome 7

Supply other materials and equipment, and complete documentation.

Performance criteria

- 7.1 Other materials and service requirements are supplied and stored in accordance with received and verified instructions.
- 7.2 Documentation is completed in accordance with company procedures.

Replacement information	This unit standard replaced unit standard 8919.
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Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 October 2005	31 December 2017
Rollover and Revision	2	16 July 2010	31 December 2017
Review	3	18 June 2015	N/A
Rollover and Revision	4	25 January 2018	N/A

Consent and Moderation Requirements (CMR) reference	0114
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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.