

Title	Demonstrate knowledge of the use of electrical reticulation plant and equipment in underground<u>extractive</u> operations		
Level	4	Credits	7

Purpose	People credited with this unit standard are able to demonstrate knowledge of the use of electrical reticulation plant and equipment in underground <u>extractive</u> operations.
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Classification	Extractive Industries > Underground_ <u>Extraction</u> <u>Extractive Industries Management</u>
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Available grade	Achieved
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Guidance Information

Explanatory notes

- 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 (Mining Operations and Quarrying Operations) Regulations 2016;~~
 - ~~Health and Safety at Work (Worker Engagement, Participation, and Representation) Regulations 2016;~~
 - ~~approved codes of practice issued pursuant to the HSW Act.~~
 - ~~Health and Safety in Employment (HSE) Act 1992;~~
 - ~~Health and Safety in Employment Regulations 1995;~~
 - ~~Health and Safety in Employment (Mining Operations and Quarrying Operations) Regulations 2013;~~
 - ~~approved codes of practice issued pursuant to the HSE Act.~~
- 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.
- 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.

Industry best practice may be documented in management plans, control plans, company procedures, managers' rules, occupational health and safety policy, industry guidelines, codes of practice, manufacturers' instructions, and safe working and/or job procedures (or equivalent).

4 ~~An underground operation includes extractive or tunnelling operations.~~

5—This unit standard is intended for, but is not limited to, workplace assessment. The range statements relate to company specific equipment, procedures, and processes.

Outcomes and performance criteria~~evidence requirements~~

Outcome 1

Demonstrate knowledge of the use of electrical reticulation plant and equipment in ~~underground~~extractive operations.

Performance criteria

Evidence requirements

1.1 The components and operation of electrical reticulation systems are described in terms of their use in ~~underground~~extractive operations.

Range includes for all extractive operations – flameproof enclosures, intrinsically safe equipment, instruments, electric motors, underground cables, joint boxes and connectors, electrical lighting, communication and signaling systems, circuit breakers, switchgear, transformers, load centres, power circuit layout, sub stations, earthing systems;
includes for underground coal mines – flameproof enclosures, intrinsically safe equipment.

1.2 The safety and protection of electrical systems in reticulation plant and equipment is described in accordance with legislation and industry best practice.

Range includes for all extractive operations – isolation and lockout procedures, earth leakage systems, overload and short circuit trips, sensors, interlocks, resetting, basic maintenance requirements and reasons for them;
includes for underground coal mines – explosion risk zones (ERZs).

1.3 Electrical circuit and equipment measuring and monitoring instruments are described in terms of their use ~~in at~~ underground extractive sites.

Range includes but is not limited to for all extractive operations – intrinsically safe, flameproof, ERZs, multimeters, voltmeters, ohmmeters, electronic instruments;
includes for underground coal mines – intrinsically safe, flameproof, ERZs.

Planned review date	31 December 2019 <u>2022</u>
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 June 2005	31 December 2017
Rollover and Revision	2	19 March 2010	31 December 2017
Review	3	18 June 2015	31 December 2019 N/A
<u>Review</u>	<u>4</u>		<u>N/A</u>

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>.

Please note

~~Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.~~

~~Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.~~

~~Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.~~

~~Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.~~

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.~~

~~Please contact the NZ Motor Industry Training Organisation (Incorporated) (MITO) info@mito.org.nz if you wish to suggest changes to the content of this unit standard.~~