

Field Engineering and Technology**Revision and Rollover of *Underground Extraction* unit standards**

Subfield	Domain	ID
Extractive Industries	Underground Extraction	7145, 7146, 7151, 7160, 7164, 7165, 13358, 15662, 15666, 15668, 15669, 15670, 16696, 16697, 17705, 17741, 17742, 19858, 19860, 19863, 19864, 21278-21281, 21629, 21813-21822, 21824, 22057

The NZ Extractive Industries Training Organisation (EXITO) has completed the rollover of the unit standards listed above.

At the same time, the unit standards shown in **bold** above were revised and rolled over.

Date new versions published

July 2010

Planned review date

December 2012

Summary

These unit standards had passed, or were coming up to, their planned review date. As EXITO is still gathering feedback and input from assessors, moderators, and other stakeholders to inform a full review, these unit standards have been rolled over to maintain their currency in the interim.

At the same time, the unit standards were revised to ensure that legislation, references, and industry terminology are up to date.

Main changes

Changes were made to the purpose statements, special notes, elements, performance criteria and ranges of the unit standards to bring them up to date.

The *Registration Criteria for National Qualifications Framework (NQF) Unit Standards* have been reviewed and replaced with the *Quality assurance criteria for the listing of unit standards on the Directory of Assessment Standards*. The changes made to the criteria during this review reflect the replacement of the NQF and the Register with the New Zealand Qualifications Framework (NZQF) and the Directory of Assessment Standards, the inclusion of criteria for grades, and changes to terminology and format of unit standards. The main changes to terminology are that:

- Special Notes were renamed *Explanatory notes*
- Elements were renamed *Outcomes*
- Performance Criteria were renamed *Evidence requirements*.

The unit standards covered by this report have been published in the new format.

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Engineering and Technology > Extractive Industries > Underground Extraction

ID	Title	Level	Credit
7145	Design, establish, and maintain effective ventilation systems for an underground mine	5	20
7146	Demonstrate basic knowledge and ability required to work in an underground mine	2	6
7151	Operate a load haul dump machine with attachments in an underground mine	3	20
7160	Describe and operate a feeder breaker in an underground extractive site	3	15
7164	Describe and operate a winding engine in an underground extractive site	4	15
7165	Install tracks and ballast for rope and locomotive haulage systems in an underground extractive site	4	10
13358	Describe and operate a longhole drill for underground extraction	4	12
15662	Evaluate ground conditions and design support methods for underground mines and tunnels	6	20
15666	Demonstrate knowledge of geology for underground extraction	4	10
15668	Demonstrate knowledge of mining methods for underground coal	6	20
15669	Demonstrate knowledge of tunnelling methods	5	15
15670	Demonstrate knowledge of mining methods for metalliferous mines	6	20
16696	Operate BG174 oxygen breathing apparatus in a confined area with an irrespirable atmosphere	4	5
16697	Deal with mine fires using extinguishing agents	4	3
17705	Describe, develop, and maintain basic ventilation systems for an underground mine or tunnel	4	15
17741	Demonstrate specialist underground survey techniques	6	15
17742	Survey and draw an underground extractive site plan	6	20
19858	Describe and operate BG4 breathing apparatus in an irrespirable atmosphere in an underground mine	4	10
19860	Recover buried equipment in underground mines	4	15
19863	Describe and operate CABA in an irrespirable atmosphere in an underground mine	4	5
19864	Supervise a mines rescue team during a mines rescue operation	6	10
21278	Describe, install, and reassess support systems for an underground mine	4	15
21279	Describe mobile machines and operate a mobile machine in an underground extractive site	3	20

ID	Title	Level	Credit
21280	Demonstrate knowledge of and design an effective ventilation system in an underground mine	6	20
21281	Interpret and test for gases in an underground extraction site	4	15
21629	Evaluate and implement plans to manage old workings and inundations in underground sites	5	10
21813	Describe and operate a continuous miner to cut and extract in an underground mine	4	35
21814	Describe and operate a powered mobile drill rig to drill a blast pattern in an underground mine	4	10
21815	Install roof and side supports using a powered mobile drill rig in an underground mine	4	10
21816	Describe and operate a diesel haul truck in an underground mine	3	20
21817	Describe and operate a hand held drill borer to drill to blast in an underground mine	4	10
21818	Describe, drill, and install support systems with a hand held drill borer in an underground mine	4	10
21819	Describe and operate a shuttle car in an underground mine	3	20
21820	Describe and operate an hydromonitor in an underground mine	4	20
21821	Supply, maintain, deliver, and store services for an underground mine	3	15
21822	Position, set up, and maintain services for hydromonitor sub-levels in an underground mine	4	15
21824	Describe and operate a roadheader to cut and extract in an underground mine	4	35
22057	Demonstrate knowledge of fluid power systems used in underground mines and tunnels	4	10