

FIELD ENGINEERING AND TECHNOLOGY**Review of *Underground Extraction* unit standards**

Subfield	Domain	Id
Extractive Industries	Underground Extraction	7145-7148, 7151, 7169, 8920, 8921, 12632, 15662, 15666, 15668, 17705

The NZ Extractive Industries Training Organisation has completed the review of the unit standards listed above that were registered in July 1999, August and November 2000, and April 2002.

Date new versions published **November 2005**

New comments by date **November 2009**

Expiry date of new versions of the unit standards **December 2010**

Summary of review and consultation process

Selected panels of industry experts met during 2003 to review the unit standards in the Underground Extraction domain that were due to expire between 2003-2005. The reviewers analysed each unit standard in turn for currency of industry practice, clarity of expression, assessability of content, elimination of restrictions to achievement, updating of references, evaluation of credit value, and appropriateness, for the certificates in which they are placed. Where major changes occurred in a unit standard, drafts were evaluated following the meeting. Submissions from industry were taken into account during the review process and other stakeholders were contacted to review drafts.

The Extractive Industries Training Organisation plans to continue, in 2005, to review the remaining units in the Underground Extraction domain, the Extractive Industries Management unit standards 15659-15660, 15672 and 17744, and the Surface Extraction unit standards 12628-12629, 17741, 17742, 17746, and 17979-17993.

Main changes resulting from the review

- Unit standards 7147, 7148, 7169, and 12632 have been replaced.
- Prerequisites have been introduced into unit standards 7145, 7151, 8920, 8921, and 17705.
- Legislation and regulations have been updated.
- Revision of wording in some titles, elements, performance criteria, and ranges for clarity and to reflect the workplace practice.

Unit standards categorised as category C expire at the end of December 2006.

Impact on existing provider accreditations

None.

Impact on existing qualifications

Qualifications that contain the reviewed standards or classifications are tabled below.

Affected	The qualification lists a reviewed classification (domain or subfield) in an elective set The qualification lists a standard that has changes to level or credits The qualification lists a C or D category standard
Not materially affected	The qualification lists a standard that has a new title The qualification lists a standard that has a new classification

The following Extractive Industries Training Organisation qualifications are affected by the outcome of this review and will be revised/reviewed in 2005. The unit standards that affect the qualifications are indicated in **bold**.

Qualification Title	Id
National Certificate in Extractive Industries (Operations) with strands in Surface Extraction, and Underground Extraction [Ref: 0248]	7146, 7147
National Certificate in Extractive Industries (Supervision) with strands in Surface Extraction and Underground Extraction [Ref: 0249]	7145, 7146, 7147
National Certificate in Extractive Industries (Shotfiring) with strands in Surface Extraction, Underground Metalliferous Extraction, Underground Coal Extraction, and Tunnelling [Ref: 0391]	8920, 8921, 12632
National Certificate in Extractive Industries (Mining Electrical Engineering Non-hazardous Areas) (Level 5) [Ref: 0804]	7145, 7146, 7148, 12632
National Diploma in Extractive Industries (Mining Electrical Engineering Hazardous Areas) (Level 5) [Ref: 0805]	7145, 7146, 7148, 7151, 7169, 12632, 17705
National Diploma in Extractive Industries (Management) with strands in Surface Extraction, Underground Coal Extraction, and Underground Metalliferous Extraction/Tunnelling [Ref: 0806]	7169 , 8920, 8921, 15662, 15666, 15668

The following Extractive Industries Training Organisation qualification is not materially affected by the changes. It will be updated when it is next reviewed.

Qualification Title	Id
National Certificate in Extractive Industries (Introductory Skills) with strands in Surface Extraction and Underground Extraction [Ref: 0247]	7146

The following qualifications are also affected by the outcome of this review. The standard setting body (SSB) has been advised that it requires revision.

Qualification title	Classification or standard in the qualification	SSB Name
National Diploma in Surveying (Level 6) with an optional strand in Mine Surveying [Ref: 0453]	7146, 12632 , 15666	InfraTrain

Summary of main changes to standards' Ids, classification, titles, levels, and credits

The following summary shows the changes made to the standards as a result of the review. All changes are in **bold**.

Subfield Extractive Industries
Domain Underground Extraction

Id	Title	Level	Credit	Review Category
7145	Design, establish, and maintain effective ventilation systems in underground mines Design, establish, and maintain effective ventilation systems for an underground mine	5	20	B
7146	Demonstrate knowledge and ability to work in an underground mine Demonstrate basic knowledge and ability required to work in an underground mine	2	6	B
7147 21278	Assess and support roof and sides of an underground mine Describe, install, and reassess support systems for an underground mine	4	10 15	C
7148 21279	Transport people and equipment, in an underground mine Describe mobile machines and operate a mobile machine in an underground mine	3	6 20	C
7151	Operate a load haul dump machine with attachments in an underground mine	3	6 20	B
7169 21280	Design an effective ventilation system in an underground mine Demonstrate knowledge of and design an effective ventilation system in an underground mine	6	15 20	C
8920	Design blasting layouts and carry out shotfiring in underground metalliferous mines Design blasting layouts and carry out shotfiring in an underground metalliferous mine	4	20	B
8921	Design blasting layouts and carry out shotfiring in underground coal mines Design blasting layouts and carry out shotfiring in an underground coal mine	4	20	B
12632 21281	Test for gases in an underground extraction site Interpret and test for gases in an underground extraction site	4	10 15	C
15662	Investigate and design a roof support system for underground mines and tunnels Evaluate ground conditions and design support methods for underground mines and tunnels	6	20	B

Id	Title	Level	Credit	Review Category
15666	Demonstrate knowledge of the geology of underground extraction Demonstrate knowledge of geology for underground extraction	4	10	B
15668	Demonstrate knowledge of extraction methods for underground coal Demonstrate knowledge of mining methods for underground coal	6	15 20	B
17705	Develop and maintain basic ventilation systems in underground mines and tunnels Describe, develop, and maintain basic ventilation systems for an underground mine or tunnel	4	15	B