

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

<b>Subfield</b>	<b>Domain</b>	<b>ID</b>
Extractive Industries	Surface Extraction	8891-8893, 8895, 8897, 8898, 8901, 8902, 8904-8906, 8909, 8911, 8914-8916, 8922, 14868, 14870, 14960-14962, 15663-15665, 15667, 16690, 16694, 16695, 17696, 17745, 17981, 17988, 17990, 17992, 17993, 21153-21156, 22058-22060

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

**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**

- Title changes have been made to unit standards 21153 and 21154.
- 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.

## Impact on registered qualifications

Key to type of impact	
<b>Affected</b>	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
<b>Not materially affected</b>	The qualification lists a standard that has a new title The qualification lists a standard that has a new classification

The following EXITO qualifications are impacted by the outcome of this revision and rollover and will be updated when they are reviewed in 2014. The qualifications are not materially affected.

Ref	Qualification Title	ID
0249	National Certificate in Extractive Industries (Supervision) (Level 4) with strands in Surface Extraction, and Underground Extraction	21153, 21154
0806	National Diploma in Extractive Industries (Management) with strands in Surface Extraction, and Underground Extraction	21154
1521	National Certificate in Extractive Industries (Operations) (Level 3) with strands in Coal Plant, Drilling Surface, Drilling Underground, Maintenance Operations, Metalliferous Processing, Mobile Plant Surface, Processing Plant, Surface Extraction, Underground Extraction, and Water Treatment	21153, 21154
1522	National Certificate in Extractive Industries (Operations) (Level 4) with strands in Drilling Underground, Metalliferous Processing, Processing Plant, Surface Extraction, and Underground Extraction	21153
1523	National Certificate in Extractive Industries (Supervision) (Level 5) with strands in Surface Extraction, and Underground Extraction	21153, 21154
1524	National Diploma in Extractive Industries (Site Management) (Level 5) with strands in Surface Extraction, and Underground Extraction	21153
1526	National Certificate in Extractive Industries (Sand) (Level 3)	21153
1527	National Certificate in Extractive Industries (Sand) (Level 4)	21154
1528	National Certificate in Extractive Industries (Environmental Technician) (Level 3)	21153, 21154
1529	National Certificate in Extractive Industries (Weighbridge Operations) (Level 3)	21153
1536	National Certificate in Extractive Industries (Mining Administration Surface Extraction B Grade) (Level 5)	21153, 21154
1538	National Certificate in Extractive Industries (Mining Administration) with strands in A Grade Tunnel Manager, and Coal Mine Underviewer	21153
1539	National Diploma in Extractive Industries (Mining Administration) (Level 6) with strands in First Class Mine Manager, and First Class Coal Mine Manager	21154

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

All changes are in **bold**.

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

### Engineering and Technology > Extractive Industries > Surface Extraction

<b>ID</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>
8891	Carry out hydraulic sand extraction operations	4	12
8892	Blend product using a blending plant for extractive industries	4	8
8893	Carry out weighbridge operations for extractive industries	3	10
8895	Supervise loading out of materials from extractive sites	4	12
8897	Adjust jaws on crushing plant for extractive industries	3	10
8898	Adjust cone crusher on crushing plant for extractive industries	3	10
8901	Make and spread stockpiles for an extractive site	2	3
8902	Prepare and implement safety plans for surface face and benching operations	4	4
8904	Produce product using a mobile crushing plant	4	25
8905	Construct and maintain access roads within surface extraction sites	3	3
8906	Apply water to surfaces and stockpiles at an extractive site	2	2
8909	Maintain working surfaces at surface extraction sites	2	2
8911	Operate a static primary crushing plant	2	12
8914	Arrange for laboratory testing of crushed stone and rock aggregates	4	15
8915	Conduct drilling operations at a surface extractive site	3	20
8916	Operate secondary and tertiary crushing plant	4	25
8922	Conduct safety checks prior to equipment usage at an extractives site	2	2
14868	Demonstrate knowledge of and operate a lime mill processing plant	4	45
14870	Operate a rope excavator	3	12
14960	Describe and operate a ladle carrier at a slag extraction site	3	20
14961	Describe and operate a dock truck at a slag extraction site	3	20
14962	Describe and operate a coil fork at a slag extraction site	3	20
15663	Design and maintain stockpiles and sloping surfaces in surface excavations and stockpiles	6	20
15664	Demonstrate knowledge of the geological nature of surface extraction sites	3	5
15665	Demonstrate knowledge of the geology of surface extraction	4	5
15667	Demonstrate knowledge of extraction methods and the effects of geological features on these methods	5	10
16690	Evaluate a mine plan, interpret, and execute sampling procedures	4	12
16694	Control quality of aggregate produced by mobile and static plant	3	4

ID	Title	Level	Credit
16695	Create a safety management system document for an extractive site	5	3
17696	Describe and apply basic skills and knowledge required to work at a surface extraction site	2	4
17745	Survey and draw a surface extractive site plan	5	10
17981	Describe and operate a hopper/cable reel car at a surface extraction site	3	6
17988	Describe and operate primary feed systems at a sand extraction site	3	10
17990	Describe and plan sampling; and collect, store, and transport samples at a surface extraction site	3	15
17992	Select, design, maintain, and manage stockpiles at an extraction site	4	15
17993	Describe and operate a tailings disposal system at an extractive site	3	12
21153	Demonstrate knowledge of dewatering, pump maintenance, cleaning settling ponds at extraction sites <b>Demonstrate and apply knowledge of dewatering, pump maintenance, and cleaning settling ponds at extraction sites</b>	3	12
21154	Demonstrate knowledge of procedures to minimise environmental impact at an extraction site <b>Demonstrate and apply knowledge of procedures to minimise environmental impact at an extraction site</b>	5	7
21155	Review consent conditions and demonstrate knowledge of the use of water at surface extraction sites	3	10
21156	Plan, implement, and describe surface extraction production to minimise environmental impacts	5	15
22058	Describe and operate a drying plant at an extractive site	3	10
22059	Describe and operate a separate circuit at a lime mill processing plant	4	20
22060	Describe and operate moveable conveyors at a surface extraction site	4	15