Field Engineering and Technology

Review of *Engineering and Technology* unit standards

Subfield	Domain	ID
Civil Plant Operation and	Civil Plant Operation	20476, 20625, 20626, 20627,
Management		20628
Civil Works and Services	Civil Construction Works	20474, 20475, 20616, 20624

InfraTrain New Zealand (InfraTrain) has completed the review of the unit standards listed above.

Date new versions published September 2010

Planned review date December 2014

Summary

These unit standards were reviewed in relation to the scheduled concurrent review of the National Certificate in Civil Construction Works (Forestry Earthworks) [Ref: 1083] and the National Certificate in Civil Plant Operation (Bulk Earthmoving) [Ref: 1094].

Industry Advisory Groups for the review of each qualification met for several days during August 2009. In the course of these meetings changes were determined for the unit standards listed above. Through peer review, feedback, and discussion the unit standards were further refined and their final content agreed.

Additionally, consultation with industry, which included a range of industry moderators, assessors and trainers, advised that the classifications need to better reflect current industry terminology and new interpretations of the description for the areas of knowledge that the existing classifications encompass. As a result the classification of subfields and domains in *Infrastructure Civil Engineering* and *Infrastructure Works* has changed.

Main changes

- The existing classification terminology was found to be no longer fit for purpose. The subfields and domains have changed.
- Credit value of unit standard 20624 was increased from two credits to four credits based on industry advice.
- Unit standard 20627 was designated expiring and will not be replaced. In lieu of this unit standard an element covering safe initial response to machine immobilisation was included in unit standards 20625 and 20628.
- New unit standards 26169 and 26170 were developed to meet the needs of industry.
- Changes were made to special notes, entry requirements, outcomes, evidence requirements, and ranges as required, reflecting current good practice.

The unit standard categorised as category D will expire at the end of December 2013.

Impact on existing accreditations

Current Accre	editation for		Accreditation ex	tended to	
Nature of accreditation	Classification	Level	Nature of accreditation	Classification	Level
Subfield	Civil Works and Services	Any	Subfield	Infrastructure Works	Same
	Civil Plant Operation and Management	Any	Subfield	Infrastructure Works	Same
Domain	Civil Construction Works	Any	Domain	Infrastructure Civil Works	Same
				Infrastructure Works Utilities	Same
	Civil Plant Operation	Any	Domain	Civil Plant Operation	Same
				Infrastructure Works Equipment	Same
				Infrastructure Works Utilities	Same

Impact on existing qualifications

Key to type of impact	
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 Infratrain qualifications are impacted by the outcome of this review and will be updated when they are reviewed in 2011. The standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	Classification or ID
1083	National Certificate in Civil Construction Works (Forestry	20474, 20475,
	Earthworks)	20476, 20616
1094	National Certificate in Civil Plant Operation (Bulk	20616, 20624-
	Earthmoving)	20626, 20627 ,
		20628,

The following Infratrain qualifications are impacted by the outcome of this review and will be updated when they are reviewed in 2013. The standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	Classification or ID
0229	National Certificate in Agrichemical Application with strands	20627
	in Livestock External Parasites, Total Vegetation Control,	
	Aquatic, Broadacre, and Brush	
0230	National Certificate in Agricultural Contracting with optional	20627
	strands in Crop Production, Fencing, Harvesting, Land	
	Development, Mechanical Vegetation Control, Transport,	
	and Zero Tillage	
1325	National Certificate in Civil Plant Operation with strands in	20628
	Culverts and Drainage Systems, Earthworks, Road	
	Construction, and Road Maintenance	

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 ld 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 > Civil Works and Services > Civil Construction Works

Engineering and Technology > Infrastructure Works > Infrastructure Civil Works

ID	Title	Level	Credit	Review Category
20616	Demonstrate knowledge of earthworks in relation to the environment	2	4	В
20624	Demonstrate knowledge of bulk earthmoving	2	2 4	В

Engineering and Technology > Civil Plant Operation and Management > Civil Plant Operation

Engineering and Technology > Infrastructure Works > Civil Plant Operation

ID	Title	Level	Credit	Review Category
20625	Operate a rigid dump truck for bulk earthmoving	3	12	В

Engineering and Technology > Civil Plant Operation and Management > Civil Plant Operation

Engineering and Technology > Infrastructure Works > Infrastructure Works Equipment

ID	Title	Level	Credit	Review Category
20626	Operate a hydraulic face shovel for bulk earthmoving operations Operate a hydraulic face shovel for bulk earthmoving	3	15	В
20628	Operate a water cart in civil construction	3	10	В

Engineering and Technology > Civil Plant Operation and Management > Civil Plant Operation

Operate a water cart for bulk earthmoving

ID	Title	Level	Credit	Review Category
20627	Describe the prevention of immobilisation and the recovery of immobilised machines	2	2	D

Engineering and Technology > Civil Works and Services > Civil Construction Works

Engineering and Technology > Infrastructure Works > Infrastructure Works Utilities

ID	Title	Level	Credit	Review Category
20474	Demonstrate knowledge of forestry earthworks job prescriptions	3	5	В
20475	Demonstrate knowledge of forestry earthworks	2	4	В

Engineering and Technology > Civil Plant Operation and Management > Civil Plant Operation

Engineering and Technology > Infrastructure Works > Infrastructure Works Utilities

ID	Title	Level	Credit	Review Category
20476	Carry out forestry earthworks construction	3	15	В

Engineering and Technology > Infrastructure Works > Civil Plant Operation

Engineering and reclinology > initiastructure works > offin hant operation					
ID	Title	Level	Credit	Review	
				Category	
26169	Operate a self-propelled, bladed compactor on	3	20	New	
	infrastructure work sites				
26170	Operate a heavy vehicle for bulk earthmoving	3	20	New	