

Field Agriculture, Forestry and Fisheries**Review of *Agriculture, Horticulture, Pest Management, and Sports Turf* unit standards**

Subfield	Domain	ID
Agriculture	Arable Farming	19068, 19069
Horticulture	Amenity Horticulture	1668, 1669, 1674, 1675
	Floriculture	1783, 1804, 1807
	Fruit Production	825, 828
	Nursery Production	1803, 1806
	Vegetable Production	1802, 1805
	Viticulture	19932
Pest Management	Pest Control	21554-21565
Sports Turf	Sports Turf Weeds and Pests	1158-1160, 1167-1169, 20530

The Primary Sector Group (PSG) has completed the review of the unit standards listed above.

Date new versions published

August 2011

Planned review date

December 2016

Summary

Discussions commenced in late 2009 between the 7 primary sector industry training organisations (ITOs) that form the PSG (Agriculture Industry Training Organisation Inc (Agriculture ITO), Equine Industry Training Organisation Inc (Equine ITO), Forest Industries Training and Education Council (FITEC), New Zealand Horticulture Industry Training Organisation Inc (Horticulture ITO), New Zealand Industry Training Organisation (NZITO), New Zealand Seafood Industry Council Limited (Seafood ITO), and New Zealand Sports Turf Industry Training Organisation Inc (Sports Turf ITO)). The decision was made to commence the review of unit standards across the PSG in the area of plant pest, weed, and disease control for the purposes of removing overlap, ie, the 'harmonisation' of unit standards.

All ITOs in the PSG were consulted in April and May 2010 to determine their roleholder requirements for plant pest, weed, and disease control. Outcomes were identified for each roleholder where a need was identified.

Outcomes were matched with registered unit standards, and where these did not exist, the content for new unit standards was identified. An outcomes document was developed and circulated by email to all accredited training providers for their feedback in June and July 2010. This initial consultation process also served to notify providers of the development, the implications of harmonisation on registered unit standards, and the subsequent impact on qualifications.

Feedback was taken into consideration in the next stage which was amending registered unit standards and writing new generic plant pest, weed, and disease control unit standards to replace the industry specific equivalents. Levels and credits of all unit standards were checked by assessors and moderators as part of the consultation process and changes were made to levels to more accurately reflect the level descriptors, and to credits to more accurately reflect the time taken for learning and assessment.

A consultation document of new and reviewed unit standards was circulated through the ITOs to their respective stakeholders for feedback in October 2010.

Feedback was taken into consideration in the final drafts. The unit standards were finalised, and endorsed by the PSG in February 2011.

Main changes

- B category review unit standards were reclassified to subfield Primary Sector, and domain Plant Pest, Weed, and Disease Control.
- Agriculture, Horticulture, and Sports Turf industry specific unit standards were replaced by generic equivalent unit standards.
- New unit standard 27217 was written to cover knowledge of integrated pest management.
- New unit standard 27216 was written to cover the preparation and application of agrichemicals using motorised equipment.
- Level and credit of unit standard 21558 have increased from 3 to 4, and 4 to 5 respectively as the level of responsibility and processes required for calibration accord best with the Level 4 descriptors.

Category C and D unit standards will expire on 31 December 2013

Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of consent	Classification or ID	Level	Nature of consent	Classification or ID	Level
Subfield	Agriculture	Any	Subfield	Primary Sector	Same
Domain	Arable Farming	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Standards	19068	4	Standards	27207	3
	19069	3		27208	3
Subfield	Horticulture	Any	Subfield	Primary Sector	Same
Domain	Amenity Horticulture	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Standards	1668	3	Standards	27208	3
	1669	3		27210	3
	1674	4		27212	4
	1675	4		27212	4
Domain	Floriculture	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Standards	1783	4	Standards	27212	4
	1804	4		27211	4
Domain	Fruit Production	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Standards	825	4	Standards	27211	4
	828	4		27207	3
				27211	4
Domain	Nursery Production	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Domain	Vegetable Production	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Domain	Viticulture	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Subfield	Pest Management	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Domain	Pest Control	Any	Domain	Plant Pest, Weed, and Disease Control	Same
Standards	21554	2	Standards	27213	
	21562	2		27210	3
	21555	2		27208	3
	21557	3		27210	3
	21559	4		27214	4
	21564	3		27215	2
Subfield	Sports Turf	Any	Subfield	Primary Sector	Same
Standards	1158	3	Standards	27207	3
	1160	3		27208	3
	1159	3		27210	3

Impact on Consent and Moderation Requirements (CMR)

All expiring standards will remain on their existing CMR. All new and Category B standards have been registered on a new CMR [Ref: 0232] developed by the PSG for the Primary Sector subfield.

Impact on registered 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 Agriculture ITO qualifications are impacted by the outcome of this review and will be updated following their mandatory review which is scheduled to commence in late 2011. The classifications and/or standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	Classification or ID
0325	National Certificate in Agrichemical Supply (Level 3) with strands in Animal Health Products, and Plant Protection Products	21563
0819	National Certificate in Seed Dressing (Level 4)	21554, 21562
0986	National Certificate in Agriculture (Level 4) with strands in Arable Farming, Cattle Farming, Dairy Farming, Deer Farming, and Sheep Farming	Pest Management > Pest Control, 19068, 19069, 21559
1036	National Certificate in Apiculture (Level 2)	21554, 21556, 21561, 21562
1069	National Certificate in Apiculture (Level 3)	Pest Management > Pest Control
1177	National Certification Poultry Husbandry (Level 3) with strands in Egg Production, Poultry Hatchery, and Poultry Meat Production	21554, 21563, 21564
1188	National Certificate in Agriculture (Production Management) with strands in Arable Farming, Cattle Farming, Dairy Farming, Deer Farming, and Sheep Farming	19068, 19069, 21559
1194	National Certificate in Aerial Agrichemical Application (Level 4)	21558, 21562, 21563, 21565
1434	National Certificate in Agriculture (Level 2) with strands in Cattle Farming, Dairy Farming, Deer Farming, and Sheep Farming	21556
1435	National Certificate in Agriculture (Animal Feeding and Pastures) (Level 3)	21555, 21556
1439	National Certificate in Arable Farming (Level 3)	19069
1468	National Certificate in Agriculture (General Skills) (Level 2)	21554, 21556, 21561, 21562, 21563, 21564
1509	National Certificate in Farming Skills (Work Ready) (Level 3)	21554, 21555, 21556, 21561, 21562, 21564

The following Equine ITO qualifications are impacted by the outcome of this review and will be updated following their mandatory review which is scheduled to commence in late 2011. The standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID
0367	National Certificate in Equine (Racecourse Maintenance) (Level 3) with strands in Harness Racing, and Thoroughbred Racing	21555, 21563, 21564
0653	National Certificate in Equine (Racecourse Management) (Level 4)	1158, 1159, 1160, 1167, 1168, 1169

The following FITEC qualifications are impacted by the outcome of this review and will be updated depending following their mandatory review which is scheduled to commence in 2014. The standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID
1411	National Certificate in Forest Operations (Level 3) with strands in Establishment, Pruning, Thinning to Waste (Small Trees), Thinning to Waste (Large Trees), Tree Felling – Basic Techniques, Thinning for Extraction, Breaking Out for Ground Based Harvesting, Breaking Out for Cable Harvesting, Land Operations, and Mensuration	21563
1412	National Certificate in Forest Operations Advanced (Level 4) with strands in Establishment and Silvicultural Operations Management, Production Tree Felling, Hauler Set-Up, Machine Operations - Hauler, Head Breaker Out - Cable Harvesting, Log Making, Machine Operations - Log Extraction, Machine Operations - Loader, Mechanised Tree Felling, Mechanised Processing, Helicopter Logging, and Inventory	21563

The following Sports Turf ITO qualifications are impacted by the outcome of this review and will be updated following their mandatory review which is scheduled to commence in 2014. The standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID
0203	National Certificate in Sports Turf Management (Level 4)	1158, 1159, 1160, 1167, 1168, 1169, 21558, 21560, 21563, 21564
0700	National Certificate in Sports Turf (Introduction to Turf Care) (Level 3)	1158, 1159, 1160
1078	National Certificate in Amenity Turf Maintenance (Level 3)	20530, 21554, 21558, 21560, 21563, 21564

The following Horticulture ITO qualifications are impacted by the outcome of this review and will be updated following their mandatory review which is scheduled to commence in 2012. The classifications and/or standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	Classification or ID
1013	National Certificate in Horticulture (Introduction) (Level 2)	Pest Management > Pest Control
1014	National Certificate in Horticulture (Level 4) with optional strands in Amenity Horticulture, Fruit Production, Landscape, Nursery Production, Post Harvest, Viticulture, and Vegetable Production	Pest Management > Pest Control, 1783
1015	National Certificate in Horticulture (Advanced) (Level 4) with strands in Amenity Horticulture, Fruit Production, Landscape, Nursery Production, Post Harvest, Production Horticulture, Viticulture, and Vegetable Production	Pest Management > Pest Control, 825, 828, 1668, 1669, 1674, 1675, 1783, 1803, 1804, 1806, 1807, 19932
1470	National Certificate in Horticulture (Practical) (Level 1)	Pest Management > Pest Control
1471	National Certificate in Horticulture (Level 3)	Pest Management > Pest Control

The following table identifies qualifications developed by other SSBs that are impacted by the outcome of this review. The SSBs have been advised that the qualifications require revision. The classifications and/or standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	Classification or ID	SSB Name
0229	National Certificate in Agrichemical Application with strands in Livestock External Parasites, Total Vegetation Control, Aquatic, Broadacre, and Brush	21554 , 21558, 21560, 21563, 21564 , 21565	Infratrain
0230	National Certificate in Agricultural Contracting with optional strands in Crop Production, Fencing, Harvesting, Land Development, Mechanical Vegetation Control, Transport, and Zero Tillage	21563, 21564	
1660	National Certificate in Infrastructure Works (Level 2) with optional strands in Earthworks, Pavement Surfacing, Roads, Rural Contracting, and Utilities	21554 , 21556, 21560, 21563, 21564	
0529	National Certificate in Compliance and Regulatory Control (Plant Pest Control (Level 4))	21563, 21564	Local Government ITO
0642	National Certificate in Conservation (Trainee Ranger) (Level 3)	21563, 21564	Learning State
0797	National Certificate in Conservation (Level 4)	Pest Management > Pest Control, 21554, 21555, 21556	
1475	National Certificate in Parks and Recreation (Park Ranger) (Level 3)	1669, 21554, 21555, 21556, 21559, 21563, 21564	Skills Active Aotearoa Ltd

Transition

While other SSBs will need to determine their qualification specific transition arrangements, transition for qualifications belonging to ITOs within the PSG are shown in the table below.

Credit for	Exempt from
825, 1804	27211
828	27207 and 27211
1668, 19069, 21557	27208
1674, 1675, 1783	27212
1158 and 1160	27207 and 27208
1159, 1669, 21555	27210
19068	27207
21554 and 21562	27213

Credit for	Exempt from
21559	27210 and 27214
21564	27215

In addition, credit achieved within the domains of Pest Control, and Sports Turf Weeds and Pests can be used to meet the requirements for electives specifying the Plant Pest, Weed, and Disease Control domain.

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

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

Agriculture, Forestry and Fisheries > Agriculture > Arable Farming

ID	Title	Level	Credit	Review Category
19068	Plan, monitor, and report on, a crop health supervisory programme	4	4	D
19069	Demonstrate knowledge of plant pests, diseases, and disorders, and assess control measures	3	4	D

Agriculture, Forestry and Fisheries > Horticulture > Amenity Horticulture

ID	Title	Level	Credit	Review Category
1668	Demonstrate knowledge of common amenity plant pests, diseases, and disorders	3	8	D
1669	Identify common weeds in amenity areas and describe control measures	3	10	D
1674	Select control programmes for amenity plant pests	4	8	D
1675	Select control programmes for amenity plant diseases and disorders	4	8	D

Agriculture, Forestry and Fisheries > Horticulture > Floriculture

ID	Title	Level	Credit	Review Category
1783	Select and apply post harvest treatments - floriculture	4	4	D
1804	Recognise common pests, diseases, and disorders important to floriculture	4	5	D
1807	Monitor pests and beneficial organisms in floriculture and act at threshold levels	4	3	D

Agriculture, Forestry and Fisheries > Horticulture > Fruit Production

ID	Title	Level	Credit	Review Category
825	Recognise common pests, diseases, and disorders important to fruit production	4	4	D
828	Monitor pests and beneficial organisms in fruit crops and act at preset threshold levels	4	3	D

Agriculture, Forestry and Fisheries > Horticulture > Nursery Production

ID	Title	Level	Credit	Review Category
1803	Recognise common pests, diseases, and disorders of nursery production	4	5	D
1806	Monitor pest and beneficial organisms in the nursery and act at threshold levels	4	4	D

Agriculture, Forestry and Fisheries > Horticulture > Vegetable Production

ID	Title	Level	Credit	Review Category
1802	Recognise common pests, diseases, and disorders important to a vegetable crop	4	4	D
1805	Monitor pests in a vegetable crop, and investigate strategies to rectify an imbalance	4	4	D

Agriculture, Forestry and Fisheries > Horticulture > Viticulture

ID	Title	Level	Credit	Review Category
19932	Monitor and control grapevine disorders and damage	4	15	D

Agriculture, Forestry and Fisheries > Pest Management > Pest Control

ID	Title	Level	Credit	Review Category
21555	Demonstrate knowledge of weeds and their control	2	4	D
21557	Identify plant pests, diseases, and disorders, and describe control measures	3	4	D
21559	Describe, plan, and manage a weed control programme	4	5	D

Agriculture, Forestry and Fisheries > Pest Management > Pest Control

Agriculture, Forestry and Fisheries > Primary Sector > Plant Pest, Weed, and Disease Control

21554	Demonstrate knowledge of safety with agrichemicals	2	3	C
21562	Identify and interpret agrichemical product information	2	2	C
27213	Identify and interpret agrichemical product information, and demonstrate knowledge of safety with agrichemicals	2	5	
21556	Control weeds under supervision	2	2	B

21558	Describe calibration, and calibrate agrichemical application equipment Describe calibration, and calibrate motorised agrichemical application equipment	3 4	3 5	B
21560	Demonstrate knowledge of agrichemicals	3	6	B
21561	Use, maintain, and store agrichemical application safety equipment Use, maintain, and store agrichemical personal protective equipment (PPE)	2	2	B
21563	Demonstrate knowledge of the HSNO Act, and NZS 8409:2004 for the use of agrichemicals	3	5	B
21564 27215	Prepare to apply, and apply, agrichemicals Prepare to apply, and apply, agrichemicals using hand held equipment	3 2	5 5	C
21565	Manage agrichemicals in accordance with NZS 8409:2004	4	10	B

Agriculture, Forestry and Fisheries > Sports Turf > Sports Turf Weeds and Pests

ID	Title	Level	Credit	Review Category
1158	Identify and monitor common turf pests	3	5	D
1159	Identify common turf weeds	3	5	D
1160	Identify common turf diseases and disorders	3	5	D
1167	Control common turf pests	4	7	D
1168	Control common turf weeds	4	7	D
1169	Control common turf diseases	4	7	D
20530	Demonstrate knowledge of weeds, pests, diseases, and disorders of amenity turf areas	3	10	D

Agriculture, Forestry and Fisheries > Primary Sector > Plant Pest, Weed, and Disease Control

ID	Title	Level	Credit	Review Category
27207	Describe and carry out monitoring of plant pests and diseases	3	5	New
27208	Identify and describe plant pests, diseases, and disorders, and methods of prevention and control	3	8	New
27209	Plan, implement, and monitor an integrated pest management (IPM) programme for a primary sector workplace	5	15	New
27210	Identify and describe weeds, and methods of prevention and control	3	6	New
27211	Recognise plant pests, diseases, and disorders, and beneficial organisms	4	6	New
27212	Plan, implement, and evaluate a plant pest and disease control programme	4	12	New
27214	Plan, implement, and evaluate a weed control programme	4	8	New
27216	Prepare to apply, and apply, agrichemicals using motorised equipment	3	4	New

ID	Title	Level	Credit	Review Category
27217	Demonstrate knowledge of integrated pest management (IPM)	3	5	New