

Field Agriculture, Forestry and Fisheries**Review of *Agricultural Vehicles and Machinery* unit standards**

Subfield	Domain	ID
Agriculture	Agricultural Vehicles and Machinery	19044,19046-19048, 19051, 19053-19055, 19061-19064, 24536-24540, 24552-24563

The Agriculture Industry Training Organisation (AgITO) has completed the review of the unit standards listed above.

Date new versions published

June 2012

Planned review date

December 2016

Summary

The review of the standards in the Agricultural Vehicles and Machinery domain was carried out due to the current concerns with on farm vehicle safety, particularly quad bikes and tractors. The Department of Labour has produced some guidelines around quad bike use, which update industry good practice. AgITO was represented on the working group that produced the guidelines, as well as informing a joint Australia/New Zealand taskforce on quad bike safety. As standard setting body for the industry, AgITO decided that the related unit standards needed to be reviewed and therefore logically, the whole domain was reviewed.

Two new unit standards at Level 1 for quad bikes and tractors were also introduced. The development of these standards was based on significant consultation with both providers who offer agricultural vehicle training in schools and the Horticulture and Agriculture Teacher's Association (HATA).

Feedback from industry, AgITO and training organisations indicated that there was a definite need for agricultural vehicle training in schools. This feedback validates the AgITO's observation over a number of years that the current agricultural vehicle unit standards are often assessed under circumstances which are not in accordance with the intent of the unit standards, that is, that the candidate can operate the vehicle safely in a workplace situation. The new Level 1 unit standards will ensure there is a better training progression towards competence in quad bike and tractor use in the workplace.

The two new unit standards (27602 and 27608) will ensure that employers have a better understanding of the extent of trainee's ability with these vehicles. They should prevent employers from making assumptions, as they currently do, that trainees are ready to operate these vehicles competently in a workplace situation.

An Industry Advisory Group (IAG) which consisted of representatives from ACC, Department of Labour, FarmSafe, training providers/tutors, Landcorp, Federated Farmers, a subject matter expert on quad bike accidents and ergonomics, Ag ITO moderators, a sheep/beef farmer and a dairy farmer was convened to review the unit standards.

Once this group had reviewed these units, they were put out for wider consultation to all training providers, as well as Beef+Lamb New Zealand, DairyNZ and AgITO regional committee chairs.

Final versions of the unit standards were endorsed by the AgITO's Agriculture Industry Committee.

Main changes

- Vehicles and Machinery explanatory notes have been changed to allow assessments to take place in a variety of workplace situations. 'On-Farm' has been changed to 'Workplace' throughout the standards.
- Standards 27604 (replacement for 24536 and 24537), 24552, 24554, 24559, 24561, and 24563 now include an assessment condition that takes into account candidate attitude and behaviour.
- Standard 24554 now includes an assessment condition requiring evidence of a minimum of 20 hours riding quad bikes.
- Standard 24552 now includes an assessment condition requiring evidence of a minimum of 10 hours driving tractors.
- Two new unit standards (as referred to in the section above), 27602 and 27608, have been developed to provide better coverage of industry need.
- Standards 19044, 19046, 19047, 19055, 19061-19063, and 24538 have had title changes to improve clarity and intent.
- Standards 19048, 19054, 24539, 24540, 24553, 24554, and 24556-24563 have had title changes to reflect current terminology.
- Standard 19051 is expiring and will not be replaced.
- Standards 24536 and 24537 have been replaced by standard 27604.
- Standards 19044, 19054, 19055, 24553, 24558, 24559, 24561, and 24563 have had a change in credit value to better reflect the time required to acquire the corresponding knowledge and skills.

Category C and D unit standards will expire at the end of 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
Standard	24536	3	Standard	27604	3
Standard	24537	3	Standard	27604	3

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 when they are reviewed. The unit standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID
0964	National Certificate in Pork Production (Stockperson) (Level 2)	19044
0986	National Certificate in Agriculture (Level 4) with strands in Arable Farming, Cattle Farming, Dairy Farming, Deer Farming, and Sheep Farming	19044 , 19061, 19062, 19063
1036	National Certificate in Apiculture (Level 2)	19046, 19047, 24540
1138	National Certificate in Pest Management with strands in Avian Pest Control, Mustelid Pest Control, Possum Pest Control, Rabbit Pest Control, and Rodent Pest Control	19054 , 19055 , 24554, 24557, 24559 , 24561 , 24563
1177	National Certificate in Poultry Husbandry (Level 3) with strands in Egg Production, Poultry Hatchery, and Poultry Meat Production	19044
1188	National Certificate in Agriculture (Production Management) with strands in Arable Farming, Cattle Farming, Dairy Farming, Deer Farming, and Sheep Farming	19062, 19063
1224	National Certificate in Pest Monitoring (Possum Monitoring – Field Operative) (Level 3)	19054 , 24556, 24557, 24558 , 24559 , 24560, 24561 , 24562, 24563
1433	National Certificate in Agriculture (Introductory Skills)	19044 , 24553 , 24554, 24556, 24557
1434	National Certificate in Agriculture (Level 2) with strands in Cattle Farming, Dairy Farming, Deer Farming, and Sheep Farming	19044 , 24553 , 24554, 24556, 24557
1435	National Certificate in Agriculture (Animal Feeding and Pastures) (Level3)	19048, 19054 , 19055 , 24558 , 24559 , 24560, 24561 , 24562, 24563
1436	National Certificate in Agriculture (Cattle Breeding) (Level 3) with strands in Beef Cattle Farming, and Dairy Cattle Farming	19054 , 19055 , 24558 , 24559 , 24560, 24561 , 24562, 24563
1438	National Certificate in Agriculture (Animal Health and Husbandry) (Level3) with strands in Cattle Farming, and Sheep Farming	19054 , 19055 , 24558 , 24559 , 24560, 24561 , 24562, 24563
1439	National Certificate in Arable Farming (Level 3)	19044 , 19047, 19048, 19054 , 19055 , 19061, 19062, 24539, 24558 , 24559 , 24560, 24561 , 24562, 24563
1440	National Certificate in Dairy Farming (Milking) (Level 3)	19054 , 19055 , 24558 , 24559 , 24560, 24561 , 24562, 24563

1441	National Certificate in Dairy Farming (Animal Health and Husbandry) (Level 3)	19054, 19055, 24558, 24559, 24560, 24561, 24562, 24563
1442	National Certificate in Deer Farming (Level 3)	19054, 19055, 24558, 24559, 24560, 24561, 24562, 24563
1443	National Certificate in Sheep Farming (Sheep Breeding) (Level 3)	19054, 19055, 24558, 24559, 24560, 24561, 24562, 24563
1465	National Certificate in Fencing (Level 3)	19044, 24537, 24557, 24559, 24563
1468	National Certificate in Agriculture (General Skills)	19044, 19054, 19055, 24536, 24537, 24539, 24553, 24554, 24556, 24557, 24558, 24559, 24560, 24561, 24562, 24563
1509	National Certificate in Farming Skills (Work Ready) (Level 3)	19044, 19046, 19047, 19048, 19054, 19055, 24536, 24537, 24538, 24539, 24553, 24554, 24556, 24557, 24558, 24559, 24560, 24561, 24562, 24563
0367	National Certificate in Equine (Racecourse Maintenance) (Level 3) with strands in Harness Racing, and Thoroughbred Racing	19044, 24557, 24561
1070	National Certificate in Equine (Breeding) (Level 4)	24553, 24554
1542	National Certificate in Equine (Breeding) (Level 3)	24553, 24554

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 standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	ID	SSB Name
0203	National Certificate in Sports Turf Management (Level 4)	19044 , 19047	New Zealand Sports Turf Industry Training Organisation
0228	National Certificate in Rural Contracting (Introductory Skills)	19044	InfraTrain New Zealand Ltd
0230	National Certificate in Agricultural Contracting with optional strands in Crop Production, Fencing, Harvesting, Land Development, Mechanical Vegetation Control, Transport, and Zero Tillage	19044 , 19046, 19063	InfraTrain New Zealand
0642	National Certificate in Conservation (Trainee Ranger) (Level 3)	24554, 24557, 24559, 24561, 24563	Learning State Limited
1014	National Certificate in Horticulture (Level 4) with optional strands in Amenity Horticulture, Fruit Production, Landscape, Nursery Production, Postharvest, Viticulture, and Vegetable Production	19044 , 19048, 19051 , 19061, 19062, 19063, 24536, 24537 , 24538, 24539	New Zealand Horticulture Industry Training Organisation
1015	National Certificate in Horticulture (Advanced) (Level 4) with strands in Amenity Horticulture, Fruit Production, Landscape, Nursery Production, Postharvest, Production Horticulture, Viticulture, and Vegetable Production	19044 , 19048, 19051 , 19061, 19062, 19063, 24536, 24537 , 24538, 24539	New Zealand Horticulture Industry Training Organisation
1078	National Certificate in Amenity Turf Maintenance (Level 3)	19044 , 19047, 24536, 24537	New Zealand Sports Turf Industry Training Organisation
1408	National Diploma in Ambulance Practice (Level 5)	24554, 24557, 24559	Electro Technology Industry Training Organisation
1409	National Certificate in Forestry (Generic Skills - Workplace Safety and Operations) (Level 2)	24556, 24557, 24558, 24559 , 24560, 24561 , 24562, 24563	Forest Industries Training and Education Council (FITEC)
1445	National Certificate in Motor Industry (Automotive Heavy Engineering) (Level 3) with strands in Agricultural Equipment, Materials Handling Equipment, Plant and Equipment, and Road Transport	19044	NZ Motor Industry Training Organisation (Incorporated)
1660	National Certificate in Infrastructure Works (Level 2) with optional strands in Earthworks, Pavement Surfacing, Roads, Rural Contracting, and Utilities	19044	InfraTrain New Zealand

Transition

The SSB and industry are of the view that organisations should be assessing against the latest versions of these unit standards as soon as possible as these reflect changes in industry guidelines and best practice and support the development of the agriculture industry safety plan to reduce rural workplace injury and death. For this reason, a last date for assessment has been specified for all superseded versions of these standards.

For standards 19044, 24552, 24554, 24557, 24559, 24561, 24563 the last date for assessment of superseded versions is December 2013, which reflects the health and safety issues associated with these vehicles. Similarly, the last date for assessment for all other standards is December 2013.

The impacts of the review are widely known amongst industry organisations and for this reason; the timelines above are seen as reasonable for the modification of qualifications, programmes and assessments. In addition, the SSB will be producing assessment material for these new unit standards which will be available for organisations to use.

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

All changes are in **bold**. The details of recommended alternative unit standards are in *Italics*.

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 > Agricultural Vehicles and Machinery

ID	Title	Level	Credit	Review Category
19044	Describe the legal requirements and occupational hazards associated with tractor use Demonstrate knowledge of the legal requirements and hazards associated with tractor use	2	2 3	B
19046	Service and repair agricultural machinery Service, repair and maintain agricultural machinery	3	6	B
19047	Describe the working principles, maintenance, and servicing of petrol and diesel engines Demonstrate knowledge of the working principles, maintenance, and servicing of petrol and diesel engines	2	2	B
19048	Apply fertilisers using tractor or All Terrain Vehicle (ATV) with mounted or trailed equipment Apply fertiliser using mounted or trailed equipment	3	6	B

ID	Title	Level	Credit	Review Category
19051	Drive a crawler tractor with an attached implement on undulating terrain	3	6	D
27604	<i>Drive a tractor with an attached implement on hilly terrain</i>	3	4	
19053	Ride a motorcycle on flat terrain	2	3	B
19054	Ride a motorcycle on undulating terrain Ride a motorcycle on hilly terrain	3	4 3	B
19055	Ride a motorcycle with mounted equipment on flat terrain Ride a motorcycle with mounted equipment or a load	3	2 3	B
19061	Cultivate with tractor drawn implements Cultivate with individual tractor-drawn implements	3	4	B
19062	Cultivate with a tractor with more than one implement Cultivate with a combination of tractor-drawn implements	4	5	B
19063	Describe methods to maximise tractor efficiency during cultivation Demonstrate knowledge of methods to maximise tractor efficiency during cultivation	4	4	B
19064	Prepare to plough, and plough a paddock	4	5	B
24536	Drive a 2 wheel drive tractor with an attached implement on undulating terrain	3	3	C
24537	Drive a 4 wheel drive tractor with an attached implement on undulating terrain	3	3	C
27604	Drive a tractor with an attached implement on hilly terrain	3	4	
24538	Demonstrate knowledge of the dynamics of tractors and implements, and 2WD and 4WD vehicles Demonstrate knowledge of tractor stability and the dynamics of tractors and attached implements	3	4	B
24539	Maintain and use a power take off (PTO) implement attached to a tractor Maintain and use a power take off (PTO) driven implement attached to a tractor	3	4	B
24540	Maintain and use a petrol powered brushcutter Maintain and use a petrol-powered brushcutter	2	2	B
24552	Check and drive a basic wheel tractor with an attached implement on flat terrain	2	5	B
24553	Drive an All Terrain Vehicle Utility (ATVU) on flat terrain Drive a light utility vehicle (LUV) on flat terrain	2	3 4	B
24554	Ride an All Terrain Vehicle (ATV) on flat terrain Ride a quad bike on flat terrain in the workplace	2	4	B

ID	Title	Level	Credit	Review Category
24555	Demonstrate knowledge of the safe operation of a motorcycle	2	3	B
24556	Demonstrate knowledge of the safe operation of an All Terrain Vehicle Utility (ATVU) Demonstrate knowledge of the safe operation of a light utility vehicle (LUV)	2	3	B
24557	Demonstrate knowledge of the safe operation of an All Terrain Vehicle (ATV) Demonstrate knowledge of the safe operation of a quad bike	2	3	B
24558	Drive an All Terrain Vehicle Utility (ATVU) on undulating terrain Drive a light utility vehicle (LUV) on hilly terrain	3	5 4	B
24559	Ride an All Terrain Vehicle (ATV) on undulating terrain Ride a quad bike on hilly terrain	3	6 4	B
24560	Drive an All Terrain Vehicle Utility (ATVU) with trailed equipment Drive a light utility vehicle (LUV) with trailed equipment	3	3	B
24561	Ride an All Terrain Vehicle (ATV) with trailed equipment Ride a quad bike with trailed equipment	3	2 4	B
24562	Drive an All Terrain Vehicle Utility (ATVU) with mounted equipment or a load Drive a light utility vehicle (LUV) with mounted equipment or a load	3	3	B
24563	Ride an All Terrain Vehicle (ATV) with mounted equipment or a load Ride a quad bike with mounted equipment or a load	3	4 3	B
27602	Ride a quad bike on flat terrain under close supervision	1	3	New
27608	Drive a basic wheel tractor on flat terrain under close supervision	1	3	New