# Government Gazette Staatskoerant

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## **GOVERNMENT NOTICE**

## South African Qualifications Authority

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## GOVERNMENT NOTICE

#### SOUTH AFRICAN QUALIFICATIONS AUTHORITY

No. 281

31 March 2006



#### SOUTH AFRICAN QUALIFICATIONS AUTHORITY (SAQA)

In accordance with regulation 24(c) of the National Standards Bodies Regulations of 28 March 1998, the Standards Generating Body (SGB) for

#### **Forestry**

Registered by Organising Field 01, Agriculture and Nature Conservation, publishes the following qualification and unit standards for public comment.

This notice contains the titles, fields, sub-fields, NQF levels, credits, and purpose of the qualification and unit standards. The qualification and unit standards can be accessed via the SAQA web-site at <a href="www.saqa.org.za">www.saqa.org.za</a>. Copies may also be obtained from the Directorate of Standards Setting and Development at the SAQA offices, Hatfield, Forum West, 1067 Arcadia Street, Hatfield, Pretoria.

Comment on the qualification and unit standards should reach SAQA at the address **below and no later than 28 April 2006.** All correspondence should be marked **Standards Setting – SGB for Forestry** and addressed to

The Director: Standards Setting and Development SAQA

Attention: Mr. D Mphuthing

Postnet Suite 248

Private Bag X06

Waterkloof

0145

or faxed to 012 – 431-5144

e-mail: dmphuthing@saqa.co.za

**DIRECTOR: STANDARDS SETTING AND DEVELOPMENT** 



#### **QUALIFICATION:**

## General Education and Training Certificate: General Forestry

QUALIFICATION	QUALIFICATION TITLE			
General Education	General Education and Training Certificate: General Forestry			
ORGANISING FIELD ID PROVIDER NAME				
	1			
	ORGANISING FIELD DESCRIPTION	SUBFIELD		
ate	Agriculture and Nature Conservation	Forestry and Wood Technology		
MINIMUM CREDITS	NQF LEVEL	QUALIFICATION CLASS		
120	Level 1	Regular-Unit Stds Based		
	General Education ate  MINIMUM CREDITS	General Education and Training Certificate: General Fore  ORGANISING FIELD ID  1  ORGANISING FIELD DESCRIPTION  ate Agriculture and Nature Conservation  MINIMUM CREDITS NQF LEVEL		

#### PURPOSE AND RATIONALE OF THE QUALIFICATION

#### Purpose:

This qualification will be useful to those who assist in general forestry activities at an entry level as part of a team. This qualification recognises entry-level skills in establishing, maintaining, protecting and harvesting plantations while enhancing safety and productivity in forestry. Protection activities include clearing fire-breaks and suppressing fires as back up, not as part of a proto-team.

Recipients of this qualification are able to:

- > Communicate in a variety of ways.
- > Use numeracy in real life situations.
- > Participate in wildfire suppression.
- > Participate in harvesting trees,
- > Participate in plantation establishment.
- > Participate in general plantation maintenance.

Recipients will also be able to participate in pine, gum or wattle-related plantation maintenance, support wildfire suppression or participate in timber extraction depending on their choice of electives.

The qualification is designed to be flexible and accessible so that people are able to demonstrate the competencies required to work safely and effectively in forestry operations.

#### Rationale:

The majority of the learners for this qualification are likely to be working in the forestry sub-field, but without any formal qualification. There is a critical need in the industry to identify and recognise people who are able to conduct the essential operations associated with efficient and safe forestry operations. The qualification will give them the opportunity to balance their practical skills with the essential operations associated with efficient and safe forestry operations.

#### RECOGNIZE PREVIOUS LEARNING?

Υ

#### LEARNING ASSUMED TO BE IN PLACE

It is assumed that learners embarking on learning programmes towards this qualification are already competent at ABET-3 Communications and Mathematical Literacy.

Recognition of prior learning:

17/03/2006

Qual ID

This qualification can be achieved wholly or in part through recognition of prior learning.

Evidence can be presented in various ways, including international and/or local qualifications, reports, testimonials mentioning functions performed, work records, portfolios, videos of practice and performance records.

All such evidence will be judged in accordance with the general principles of assessment.

Access to the qualification:

Open, bearing in mind learning assumed to be in place.

#### **QUALIFICATION RULES**

- > Fundamental all 39 credits in the Fundamental Category are required.
- > Core all 69 credits in the Core Category are required.
- > Elective candidates must select at least 12 of the possible 20 credits in the Elective Category.

#### **EXIT LEVEL OUTCOMES**

- 1. Participate in wildfire suppression.
- 2. Participate in tree harvesting and timber extraction.
- 3. Participate in plantation establishment.
- 4. Participate in plantation maintenance.
- 5. Demonstrate knowledge of and apply conservation and environmental issues.
- Manage self and work with others.

#### Critical Cross-Field Outcomes

This qualification addresses the following Critical Cross-Field Outcomes, as detailed in the Unit Standards:

- > Identifying and solving problems in which responses indicate that responsible decisions using critical and creative thinking have been made.
- > Working effectively with others as a member of a team, group, organisation or community.
- > Organising and managing oneself and one's activities responsibly and effectively.
- > Collecting, analysing, organising and critically evaluating information.
- > Communicating effectively using visual, mathematical and/or language skills in the modes of oral/written persuasion.
- > Using science and technology effectively and critically, showing responsibility towards the environment and health of others.
- > Demonstrating and understanding of the world as a set of related systems by recognising that problemsolving contexts do not exist in isolation.

Learning programmes directed towards this qualification will also contribute to the full personal development of each learner and the social and economic development of the society at large, by making individuals aware of the importance of:

- > Reflecting on and exploring a variety of strategies to learn more effectively.
- > Participating as responsible citizens in the life of local, national and global communities.
- > Being culturally and aesthetically sensitive across a range of social contexts.
- > Exploring education and career opportunities; and developing entrepreneurial opportunities.

#### ASSOCIATED ASSESSMENT CRITERIA

- 1.
- > Activities contribute to the effective suppression of wildfires.
- > Basic fire fighting techniques are used in line with industry standards.
- > Support activities are carried out according to plan and given instructions.
- 2
- > Trees are harvested safely and to production schedules.
- > Timber is extracted safely and according to plan.
- 3
- > Plantations are established according to plan.
- > Pesticides and fertilisers are applied before and after planting as per given instructions.

- > Waste is cleared as per given instructions.
- 4.
- > Plantations are maintained according to plan.
- > Trees are debarked and pruned as per given requirements.
- > Tools and materials are used in line with industry safety standards.
- 5
- > Conservation and environmental issues are described in terms of given definitions.
- > Community issues are identified in relation to conservation.
- 6
- > Financial issues are addressed according to basic financial principles.
- > Basic work requirements are described in line with given instructions.
- > Basic responsibilities are described in terms of company documentation.

#### Integrated assessment

The integrated assessment allows the learners the opportunity to show that they are able to utilize concepts, ideas and actions across the unit standards. This will allow learners to achieve competency that is in keeping with the purpose of the qualification.

An integrated assessment will indicate how theoretical learning is demonstrated in a practical environment in such a way that the application of the work learnt becomes second nature.

In conducting an assessment, the quality of the performance must also be evaluated i.e. both the performance and the thinking behind the action must be qualitative.

The assessment should include both formative and summative options and should use various assessment tools i.e. not by observation only. It is required that a Portfolio of Assessment form part of the summative assessment, with practical outcomes being demonstrated in a simulated or real work place situation.

A broad range of task-orientated and theoretical tools may be used, with the distinction between practical knowledge and disciplinary knowledge being maintained.

It is recommended that the assessment tools give learners the opportunity to account for their decision-making and problem solving in line with the specific outcomes and related assessment criteria.

As a result of this qualification being generic in forming the foundation for a career in forestry industry, learners should be assessed in occupational contexts and activities. The assessment should ensure that the foundational skills are portable and prepare them for further learning, whatever career path they may choose.

Assessors should take note of the following general principles when designing and conducting assessments:

- > Focus the initial assessment activities on gathering evidence in terms of the main outcomes expressed in the titles of the unit standards to ensure assessment is integrated rather than fragmented. Remember that we want to declare the person competent in terms of the qualification purpose. Where assessment at title level is unmanageable, then the assessment should be focussed on each specific outcome, or groups of specific outcomes. Take special note of the need for integrated assessment.
- > Ensure that assessment is gathered across the entire range, wherever it applies. Assessment activities should be as close to the real performance as possible, and where simulations or role-players are used, there should be supporting evidence to prove that the learner is able to perform in the real situation.

#### INTERNATIONAL COMPARABILITY

There are no international qualifications that could be found to compare to this qualification directly, although there was sufficient overlap in a New Zealand qualification and a set of UK qualifications to validate the design of this qualification. The need for a level 1 general forestry qualification appears to be unique to South Africa, with the entry qualifications in other countries being slightly higher, but with similar requirements.

The following level 2 unit standards in New Zealand compare favourably with those in this qualification, although the emphasis in the New Zealand unit standards is on knowledge, whereas the need expressed in the South African qualification is for practical applications of that knowledge.

17/03/2006

- > 17757 Demonstrate knowledge of commercial forestry and forest industry sectors in New Zealand.
- > 17760 Demonstrate knowledge of commercial plantation trees in New Zealand.
- > 13109 Demonstrate knowledge of factors which impair the performance of forestry workers.
- > 1241 Demonstrate knowledge of plantation forest establishment and silviculture.
- > 1227 Demonstrate knowledge of plantation forest harvesting.
- > 17761 Demonstrate knowledge of quality determining factors in commercial plantation forestry.
- > 17769 Demonstrate knowledge of the general requirements for employment in a plantation forest.
- > 13108 Describe effects of hydration and nutrition on safety, health and performance of forestry workers.

The following units identified across a range of UK-based qualifications compare favourably with the unit standards in the General Forestry qualification:

NPTC Level 2 Certificate of Competence in Chainsaw and Related Operations.

> Unit - F/101/7908 - Unit CS 40 - Carry Out Pruning Operations.

NPTC Level 2 National Certificate in Horticulture.

> Unit - F/101/9934 - Unit 32 - Harvesting, Extraction and Mensuration.

#### NPTC Level 2 NVQ in Forestry.

- > Unit T/101/4732 H&S Unit A Ensure Your Own Actions Reduce Risks to Health and Safety.
- > Unit J/101/5321 Unit T04 Clear Sites for Tree Planting.
- > Unit L/101/5322 Unit T05 Cultivate Sites for Tree Planting.
- > Unit R/101/5323 Unit T06 Plant Trees.
- > Unit Y/101/5324 Unit T07 Carry Out Post-Planting Protection and Maintenance.
- > Unit D/101/5325 Unit T08 Control Unwanted Plant Growth Around Trees.

In conclusion it would appear that the competences developed by this qualifications compare favourable with that offered in the countries researched. Furthermore the New Zealand qualifications in terms of knowledge component compares directly with those used for Forestry in South Africa.

#### **ARTICULATION OPTIONS**

This qualification is an entry level qualification builds and acts as a springboard for people who may want to progress to other qualifications in forestry, forestry-related fields and supervision in other contexts. However, this qualification in particular can articulate well in other areas of learning such as Silviculture and Harvesting in forestry.

Horizontal articulation possibilities:

> National Certificate: Plant Production at NQF Level 1.

Vertical articulation possibilities:

> National Certificate: Plant Production at NQF Level 2.

#### **MODERATION OPTIONS**

Any institution offering learning or assessment in terms of this qualification or associated unit standards must be accredited as a provider with the relevant ETQA. Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines in the relevant qualification and the agreed ETQA procedures.

#### CRITERIA FOR THE REGISTRATION OF ASSESSORS

Criteria for the registration of assessors:

Anyone assessing a learner in terms of this qualification or associated unit standards must:

- > Be registered as an assessor by the relevant ETQA.
- > Have experience or in depth knowledge of the forestry industry.
- > Hold a qualification in Forestry at NQF Level 2 or higher.

#### NOTES

N/A

UNIT STANDARDS (Note: A blank space after this line means that the qualification is not based on Unit Standards.)

	UNIT STANDARD ID AND TITLE	LEVEL	CREDITS	STATUS
Core	12509 Manage personal finances	Level 1	8	Reregistered
Core	12512 Practice environmental awareness	Level 1	4	Reregistered
Core	12513 Plan and manage time in the workplace	Level 1	4	Reregistered
Core	12649 Identify community issues in relation to conservation	Level 1	4	Reregistered
Core	12650 Understand the nature and importance of conservation	Level 1	5	Reregistered
Core	13998 Demonstrate an understanding of the principles of supply and demand, and the concept: production		2	Reregistered
Core	117079 Identify, explain and demonstrate standard safety procedures during active Level 1 wildfire suppression		2	Registered
Core	117082 Contribute to the suppression of wildfires at basic fire-fighting level	Level 1	2	Registered
Core	1 19567 Perform basic life support and first aid procedures	Level 1	5	Registered
Core	1231.30 Demonstrate knowledge of key elements of commercial forestry	Level 1	2	Draft - Prep for P Comment
Core	123131 Plant plantation trees	Level 1	·1	Draft - Prep for P Comment
Core	123132 Eradicate weeds manually in a commercial environment	Level 1	1	Draft - Prep for P Comment
Core	123133 Prepare planting site using hand tools	Level 1	1	Draft - Prep for P Comment
Core	123134 Apply herbicides to noxious weeds	Level 1	3	Draft - Prep for P Comment
Core	123135 Apply pesticides before or after planting	Level 1	1	Draft - Prep for P Comment
Core	123136 Describe the environmental impacts of commercial forestry	Level 1	2	Draft - Prep for P Comment
Core	123137 Describe and explain basic safety requirements in a forestry environment	Level 1	2	Draft - Prep for P
Core	123139 Apply fertiliser before and after planting	Level 1	1	Draft - Prep for P Comment
Core	123140 Clear plantation waste by burning	Level 1	1	Draft - Prep for P
Core	123141 Debranch trees using an axe/hatchet	Level 1		Draft - Prep for P
Core	8420 Operate in a team	Level 2	4	Reregistered
Core	8494 Demonstrate an understanding of HIV/AIDS and its implications	Level 2	4	Reregistered
Соге	12466 Explain the individual's role within business	Level 2	4	Registered
Core	113924 Apply basic business ethics in a work environment	Level 2	2	Registered
Core	117049 Demonstrate knowledge of basic safety in forestry operations	Level 2	1	Registered
Córe	120086 Identify engineering tools, material and equipment and explain the purpose and function of each	Level 2	3	Registered
Elective	123,143. Reduce coppice in gum plantations	Level 1	2	Draft - Prep for P. Comment
Elective	123145 Select and space trees in commercial wattle forests	Level 1	2	Draft - Prep for P
Elective	123146 Debark trees with a hatchet and prepare bank bundles in a wattle operation	Level 1	2	Draft - Prep for P Comment
lective lective	117043 Choke and dechoke timber during extraction with a skidding machine fitted with a winch in a production situation.  117081 Choke and dechoke timber during extraction with a cable varder in a production	Level 2	3 3	Registered
Elective	situation  123138 Operate and maintain a motorised water pump	Level 2	2	Registered
Elective	123142 Prune for access in Commercial Forestry and to ensure correct stem form	Level 2		Draft - Prep for P Comment Draft - Prep for P
Elective	123148 Load and refuel fixed wing aircraft for wildfire suppression	Level 2		Comment  Draft - Prep for P
Elective	123149 Communicate using a two-way radio system	Level 2		Comment  Draft - Prep for P
				Comment
undamental	7447 Working with numbers in various contexts	Level 1		Reregistered
-undamental	7449 Critically analyse how mathematics is used in social, political and economic relations	Level 1	2	Reregistered

Fundamental	7451 Collect, analyse, use and communicate numerical data	Level 1	2	Reregistered
Fundamental	7461 Use maps to access and communicate information concerning routes, location and direction	Level 1	1	Reregistered
Fundamental	7463 Describe and represent objects and the environment in terms of shape, space, time and motion	Level 1	2	Reregistered
Fundamental	7.464 Analyse cultural products and processes as representations of shape, space and time	Level 1	2	Reregistered
Fundamental	14084 Demonstrate an understanding of and use the numbering system	Level 1	1	Registered
Fundamental	119631 Explore and use a variety of strategies to learn	Level 1	5	Registered
Fundamental	119635 Engage in a range of speaking/signing and listening interactions for a variety of purposes	Level 1	6	Registered
Fundamental	119636 Write/Sign for a variety of different purposes	Level 1	6	Registered
Fundamental	1.19640 Read/view and respond to a range of text types	Level 1	6	Registered



#### **UNIT STANDARD:**

1

#### Demonstrate knowledge of key elements of commercial forestry

UNIT STANDARD TITLE  Demonstrate knowledge of key elements of commercial forestry		
	1	
RD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
	Agriculture and Nature Conservation	Forestry and Wood Technology
CREDITS	NQF LEVEL	UNIT STANDARD TYPE
2	Level 1	Regular
	RD TYPE	ORGANISING FIELD ID  1  ARD TYPE ORGANISING FIELD DESCRIPTION Agriculture and Nature Conservation  CREDITS NOF LEVEL

#### SPECIFIC OUTCOME 1

Demonstrate knowledge of commercial forestry research.

#### SPECIFIC OUTCOME 2

Demonstrate knowledge of Silviculture in commercial forestry.

## SPECIFIC OUTCOME 3

Demonstrate knowledge of harvesting in commercial forestry.

#### SPECIFIC OUTCOME 4

Demonstrate knowledge of fire protection in commercial forestry.

#### SPECIFIC OUTCOME 5

Demonstrate knowledge of conservation in commercial forestry.

## SPECIFIC OUTCOME 6

Demonstrate knowledge of the management function in commercial forestry.

#### SPECIFIC OUTCOME 7

Demonstrate knowledge of commercial forest nurseries.



## **UNIT STANDARD:**

2

## Plant plantation trees

SAQA US ID	UNIT STANDARD TITLE			
123131	Plant plantation trees			
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME	
SGB Forestry		1		
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	<u> </u>	Agriculture and Nature Conservation	Forestry and Wood Technology	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE	
Undefined	1	Level 1	Regular	

#### SPECIFIC OUTCOME 1

Prepare for planting.

## SPECIFIC OUTCOME 2

Plant plantation trees.



#### **UNIT STANDARD:**

3

## Eradicate weeds manually in a commercial environment

SAQA US ID	UNIT STANDARD TITLE		
123132	Eradicate weeds manually in a commercial environment		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	1	Level 1	Regular

#### SPECIFIC OUTCOME 1

Prepare for manual weed-control.

## SPECIFIC OUTCOME 2

Hand pull weeds.

## SPECIFIC OUTCOME 3

Hoe weeds,

## SPECIFIC OUTCOME 4

Slash weeds.

## SPECIFIC OUTCOME 5

Ring bark weeds.



## **UNIT STANDARD:**

4

## Prepare planting site using hand tools

SAQA US ID	UNIT STANDARD TITLE Prepare planting site using hand tools		
123133			
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	1"	Level 1	Regular

## SPECIFIC OUTCOME 1

Prepare for pitting operation.

## SPECIFIC OUTCOME 2

Carry out pitting operation.



## **UNIT STANDARD:**

5

#### Apply herbicides to noxious weeds

UNIT STANDARD TITLE		
Apply herbicides to noxious weeds		
_	ORGANISING FIELD ID	PROVIDER NAME
,	.1	
ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
	Agriculture and Nature Conservation	Forestry and Wood Technology
CREDITS	NQF LEVEL	UNIT STANDARD TYPE
3	Level 1	Regular
	Apply herbicion	Apply herbicides to noxious weeds  ORGANISING FIELD ID  1  ARD TYPE ORGANISING FIELD DESCRIPTION Agriculture and Nature Conservation  CREDITS NOF LEVEL

## SPECIFIC OUTCOME 1

Prepare for chemical weed control.

## SPECIFIC OUTCOME 2

Apply chemicals to weeds.

## SPECIFIC OUTCOME 3

Practice safe work procedures when using agrochemicals.

## SPECIFIC OUTCOME 4

Maintain equipment.



## **UNIT STANDARD:**

6

## Apply pesticides before or after planting

SAQA US ID	UNIT STANDARD TITLE		
123135	Apply pesticides before or after planting		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	1	Level 1	Regular

## SPECIFIC OUTCOME 1

Demonstrate knowledge of pests, pesticides, equipment and methods.

#### SPECIFIC OUTCOME 2

Prepare for application of pesticides.

## SPECIFIC OUTCOME 3

Apply pesticide.



#### **UNIT STANDARD:**

7

#### Describe the environmental impacts of commercial forestry

SAQA US ID	UNIT STANDARD TITLE		
123136	Describe the environmental impacts of commercial forestry		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry	,	1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 1	Regular

#### SPECIFIC OUTCOME 1

Describe environmental responsibilities and their impact in the community.

#### SPECIFIC OUTCOME 2

Describe environmental responsibilities in the workplace.

#### SPECIFIC OUTCOME 3

Describe the interaction between commercial forestry and the environment.

#### SPECIFIC OUTCOME 4

Describe world-wide environmental disturbances.



#### **UNIT STANDARD:**

8

## Describe and explain basic safety requirements in a forestry environment

SAQA US ID	UNIT STANDARD TITLE		
123137	Describe and explain basic safety requirements in a forestry environment		
SGB NAME	1	ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 1	Regular

#### SPECIFIC OUTCOME 1

Describe and explain general safe working practices and procedures.

## SPECIFIC OUTCOME 2

Explain basic safety requirements.

## SPECIFIC OUTCOME 3

Explain preventative measures.



## **UNIT STANDARD:**

9

## Operate and maintain a motorised water pump

SAQA US ID	UNIT STANDARD TITLE			
123138	Operate and maintain a motorised water pump			
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME	
SGB Forestry		1		
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION	
Regular	_	Agriculture and Nature Conservation	Forestry and Wood Technology	
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE	
Undefined	2	Level 2	Regular	

#### SPECIFIC OUTCOME 1

Operate and refuel a water pump.

#### SPECIFIC OUTCOME 2

Maintain water pumps, nozzles and hoses.

## SPECIFIC OUTCOME 3

Refill water from reserve supply.



#### UNIT STANDARD:

10

## Apply fertiliser before and after planting

SAQA US ID	UNIT STANDARD TITLE		
123139	Apply fertiliser before and after planting		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	,
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	1	Level 1	Regular

#### SPECIFIC OUTCOME 1

Demonstrate knowledge of fertiliser, equipment and methods.

## SPECIFIC OUTCOME 2

Prepare for fertiliser application.

## SPECIFIC OUTCOME 3

Apply fertiliser.



## **UNIT STANDARD:**

11

## Clear plantation waste by burning

SAQA US ID	UNIT STANDARD TITLE		
123140	Clear plantation waste by burning		
SGB NAME	_	ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	1	Level 1	Regular

SPECIFIC OUTCOME 1

Prepare area to be burnt.

SPECIFIC OUTCOME 2

Burn waste.

SPECIFIC OUTCOME 3

Mop up.



## **UNIT STANDARD:**

12

## Debranch trees using an axe/hatchet

UNIT STANDARD TITLE		
Debranch trees using an axe/hatchet		
	ORGANISING FIELD ID	PROVIDER NAME
_	1	
ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
	Agriculture and Nature Conservation	Forestry and Wood Technology
CREDITS	NQF LEVEL	UNIT STANDARD TYPE
1	Level 1	Regular
	Debranch tree	ORGANISING FIELD ID  1  ARD TYPE ORGANISING FIELD DESCRIPTION Agriculture and Nature Conservation  CREDITS NQF LEVEL

## SPECIFIC OUTCOME 1

Demonstrate knowledge of factors influencing efficiencies in debranching using an axe/hatchet.

#### SPECIFIC OUTCOME 2

Prepare for debranching.

## SPECIFIC OUTCOME 3

Debranch trees to meet specifications.



## **UNIT STANDARD:**

13

## Prune for access in Commercial Forestry and to ensure correct stem form

SAQA US ID	UNIT STANDARD TITLE		
123142	Prune for access in Commercial Forestry and to ensure correct stem form		
SGB NAME	-,	ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 2	Regular

SPECIFIC OUTCOME 1

Prepare for pruning.

SPECIFIC OUTCOME 2

Prune trees.



## **UNIT STANDARD:**

14

## Reduce coppice in gum plantations

SAQA US ID	UNIT STANDARD TITLE		
123143	Reduce coppice in gum plantations		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 1	Regular

#### SPECIFIC OUTCOME 1

Prepare for coppice reduction.

## SPECIFIC OUTCOME 2

Reduce coppice.



## **UNIT STANDARD:**

15

## Select and space trees in commercial wattle forests

SAQA US ID	UNIT STANDARD TITLE		
123145	Select and space trees in commercial wattle forests		
SGB NAME	<u>r</u>	ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 1	Regular

## SPECIFIC OUTCOME 1

Prepare for spacing operation.

#### SPECIFIC OUTCOME 2

Select and space trees.



## **UNIT STANDARD:**

16

#### Debark trees with a hatchet and prepare bark bundles in a wattle operation

SAQA US ID	UNIT STANDARD TITLE  Debark trees with a hatchet and prepare bark bundles in a wattle operation		
123146			
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 1	Regular

#### SPECIFIC OUTCOME 1

Demonstrate knowledge of factors influencing efficiencies in debarking using a hatchet and preparing bark bundles.

#### SPECIFIC OUTCOME 2

Prepare for debarking and preparation of bark bundles.

#### SPECIFIC OUTCOME 3

Debark trees and prepare bark bundles to meet specifications.



## **UNIT STANDARD:**

17

# Load and refuel fixed wing aircraft for wildfire suppression

SAQA US ID	UNIT STANDARD TITLE		
123148	Load and refuel fixed wing aircraft for wildfire suppression		
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	·
UNIT STANDA	ARD TYPE	ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NQF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 2	Regular

#### SPECIFIC OUTCOME 1

Load fixed wing aircraft used for wildfire suppression.

## SPECIFIC OUTCOME 2

Re-fuel fixed wing aircraft used for aerial wildfire suppression.



## **UNIT STANDARD:**

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## Communicate using a two-way radio system

SAQA US ID	UNIT STANDARD TITLE  Communicate using a two-way radio system		
123149			
SGB NAME		ORGANISING FIELD ID	PROVIDER NAME
SGB Forestry		1	
UNIT STANDARD TYPE		ORGANISING FIELD DESCRIPTION	SUBFIELD DESCRIPTION
Regular		Agriculture and Nature Conservation	Forestry and Wood Technology
ABET BAND	CREDITS	NOF LEVEL	UNIT STANDARD TYPE
Undefined	2	Level 2	Regular

## SPECIFIC OUTCOME 1

Communicate messages via radio.

## SPECIFIC OUTCOME 2

Establish reasons for varying signal strengths and take corrective actions.