# **Modification history**

Release	Comments
Release 3	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0.
Release 2	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 2.0.
Release 1	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0.

AHCARB303	Perform pruning operations
Application	This unit of competency describes the skills and knowledge required to perform corrective and remedial pruning operations to trees either from the ground or situated in position in aerial locations.
	The unit applies to individuals who work under broad supervision and take responsibility for their own work. They use discretion and judgement in the selection, allocation and use of available resources and for solving problems.
	Legislation, regulations and by-laws relating to the treatment and removal of trees apply nationally and in some states, territories and jurisdictions.
Prerequisite Unit	Nil
Unit Sector	Arboriculture (ARB)

Elements	Performance Criteria
Elements describe the	Performance criteria describe the performance needed to demonstrate
essential outcomes.	achievement of the element.
Prepare for pruning	1.1 Receive and clarify instruction with supervisor
operations	1.2 Confirm access to site and location of trees
	1.3 Determine type, extent and limit of pruning work in accordance with
	specifications, scope of works and client brief
	1.4 Undertake a site-specific Job Safety Analysis (JSA) and record and
	implement site-specific control measures
	1.5 Communicate with work team using agreed methods according to works
	undertaken and site and environmental conditions
2. Select and prepare tools	2.1 Select tools and equipment for pruning work
and equipment	2.2 Consider access and impact of selected pruning tools and equipment
	on tree
	2.3 Carry out pre-operational and safety checks on pruning tools and
	equipment
	2.4 Select, ensure serviceable and use personal protective equipment
	2.5 Disinfect pruning equipment during tree work according to hygiene and
	biosecurity procedures and tree assessment outcomes
	2.6 Implement work health, safety, site, environmental and traffic control
	measures according to JSA
3. Determine tree part to be	3.1 Investigate tree canopy shape, structure and defects to determine
removed	crown maintenance and crown modifications required
	3.2 Assess tree structure for stem co-dominance and branch attachment to
	determine options for pruning cut procedure
	3.3 Identify tree part requiring removal and select pruning procedure and
	location of cut from identified pruning cut options

Elements	Performance Criteria	
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
4. Perform pruning	4.1 Prepare pruning equipment to ensure cuts are clean	
operations	4.2 Operate mechanical pruning equipment for pruning cuts according to industry standards and manufacturer operating instructions	
	4.3 Make cuts from a secure body position with awareness of extant tree hazards	
	4.4 Maintain awareness of power line proximity, safe approach distances and clearances	
	4.3 Select pruning cuts for crown maintenance or crown modification according to scope of works	
	4.4 Perform pre-cutting techniques to avoid splitting or tearing of the stem and bark	
	4.5 Perform final cut according to the principles of compartmentalisation of decay in trees (CODIT) and current industry standards	
	4.6 Ensure bark at edge of all pruning cuts remains firmly attached	
5. Improve pruning quality	5.1 Review previous pruning cuts to determine tree response to pruning activities	
	5.2 Assess tree response to previous pruning methods and compare with current work practice	
	5.3 Seek advice from arborist on quality of current pruning work practice	
	5.4 Identify substandard current pruning cuts and rectify according to advice	
	5.5 Modify future pruning methods to comply with tree response and	
	arborists advice	
<ol><li>Complete pruning</li></ol>	6.1 Drop pruning material into designated drop zone	
operations	6.2 Clean, maintain and store tools and equipment	
	6.3 Collect and dispose of pruned material according to environmental	
	procedures	
	6.4 Maintain pruning records according to workplace procedures	

# Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description	
Learning	Include a learning statement from Element 5	
	•	
	•	

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCARB303 Perform pruning operations	AHCARB303 Perform pruning operations	Edited Elements and performance criteria for clarity and consistency	Equivalent unit

Links	Companion Volumes, including Implementation Guides, are available at VETNet:
	https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-
	9c62-4a5e-bf1a-524b2322cf72

Assessment requirements for AHCARB303 Perform pruning
operations

#### **Performance Evidence**

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has demonstrated pruning operations for the following:

- demonstrated crown maintenance operations for All of the following:
  - removed dead wood from the tree canopy
  - · thinned the crown of a tree
  - selectively pruned branches to resolve specific problems
  - formatively pruned a young tree
- demonstrated crown modification for 2, 3, 4 or All of the following:
  - reduced the extent of the crown
  - lifted the height of the crown
  - pollarded a tree
  - pruned a tree to restore a canopy
  - pruned trees for line clearance

There must also be evidence that the individual has:

- received and confirmed pruning instructions, tree access and location of tree to be pruned
- undertaken a job safety analysis (JSA) for the specific site and work activities and implemented control measures
- communicated with work team during operations using communication method agreed with work team
- inspecting trees for access and work
- determined type extent and limit of pruning work in accordance with the specifications, scope of works or client brief
- operated safely while undertaking work including:
  - maintained safe proximity, approach distances and clearance to power lines
  - selected and used personal protective equipment
- · selected tools and equipment for pruning operations
- considered access and impact value of selected equipment on tree
- prepared and conducted pre-operational and safety checks, on tools, equipment and machinery
- treated pruning equipment in accordance with hygiene and biosecurity practices
- determined crown maintenance and modifications required and identified pruning cut options by recognising:
  - · stem co-dominance
  - stem bark ridge
  - old cuts
  - dead branches
  - · occluded and occluding branches
- prepared pruning equipment to ensure clean pruning cuts
- · operating chainsaws and pole saws according to manufacturer instructions
- performed pruning cuts according to current industry standards including:
  - made cuts from a secure and safe position
  - · used pre-cuts and undercuts of branches to avoid splitting or tearing
  - · bark remained firmly attached
- performed final cuts that complied with principles of compartmentalisation of decay in trees (CODIT) including:
  - cut to the branch collar without leaving a protruding stub
  - used branch bark ridge to determine angle of cut where visible collar is absent
  - ensured bark at edge of all branch pruning cuts remained firmly attached
  - ensured lateral branch to which the final cut is made is the correct diameter of the branch being reduced
  - used stem bark ridge to determine the angle of cut when removing a co-dominant stem
  - positioned the final cut by positions and angles of joins between tissue of declining or dead stems and those of healthy stems elsewhere in tree

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	operations

#### **Performance Evidence**

- ensured bark at edge of cuts remained firmly attached
- conducted a review of pruning practices for tree response to pruning and advice from arborist and modified pruning methods to improve pruning quality
- dropped pruning material into designated drop zone
- · cleaned, maintained and stored tools and equipment according to workplace procedures
- collected and disposed of, or recycling pruned material according to work place and environmental procedures
- maintained pruning records according to workplace procedures.

### **Knowledge Evidence**

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose of pruning trees and the standards expected including:
  - canopy maintenance and the principles of dead wooding, crown thinning, selective pruning, formative pruning
  - canopy modification and the principles of reduction pruning, crown lifting, pollarding, remedial pruning, line clearance
- work health and safety procedures for pruning operations
- procedures and process of job safety analysis (JSA) for pruning work site and activities and control measures including:
  - recognition of hazards
  - assessing the risks
  - identifying controls
  - · documenting a JSA
  - personal protection
  - first aid
  - rescue procedures
- visual tree assessment
  - tree health, growth habit, structure, stability and growing environment
- pruning equipment and their advantages and disadvantages and impact value on trees including:
  - secateurs
  - chainsaws
  - pole saws
  - handsaws
  - · equipment pre-start checks
- tree and branch anatomy and attachments relevant to pruning including:
  - lateral branch collars
  - branch bark ridges
  - stem bark ridges
  - occluded and occluding branches
  - dominant and co-dominant stems
- pruning cuts to the standards required by industry and Australian Standards (AS 4373)
- gauging the quality of pruning by assessing tree responses to pruning
  - recognising correct and incorrect pruning cuts
  - rectifying poor pruning cuts
- hygiene and biosecurity procedures to minimise cross infections from pruning activity
- safe communication during tree pruning work including the impact of noise, environmental conditions, communications resources, visibility
- communications strategies used in the arboriculture industry including:
  - voice
  - hand
  - · whistle signals
  - electronic communications

## **Knowledge Evidence**

- · safety and procedures when working near overhead power lines
  - basics of electrocution
  - power line types and insulation
  - approach distances and safety zones, voltage and arching
  - authorisations to work near power lines
  - tools, equipment, tree loads, personnel and power line contact
  - legal liability
- workplace records for pruning operations
- environmental procedures and site management and clean-up.

#### **Assessment Conditions**

Assessment of skills must take place under the following conditions:

- physical conditions:
  - access to trees to be pruned for crown maintenance and crown modification as specified in the performance evidence
- · resources, equipment and materials:
  - chainsaws climbing saw
  - pole saw
  - pruning handsaws
  - · high decibel whistle
  - personal protective equipment (PPE)
  - first aid and emergency kit
  - · traffic management kit
  - signage work zone
  - trees and tree parts
- specifications:
  - workplace procedures and instructions, related dismantling trees
  - legislation, regulations, codes of practice and standards relating to tree pruning
  - documentation for planning, obtaining permits and reporting tree pruning work
- relationships:
  - client and work team

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

In addition, the following specific assessor requirements apply to this unit:

- · arboriculture vocational competencies at least to the level being assessed
- current arboriculture industry skills directly relevant to the unit of competency being assessed.

Links	Companion Volumes, including Implementation Guides, are available at VETNet:
	https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-
	bf1a-524b2322cf72