FWPHAR3221 Harvest trees manually (advanced)

Release: 2

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Modification History

Release	Comments
Release 2	This version released with FWP Forest and Wood Products Training Package Version 3.0.
Release 1	This version released with FWP Forest and Wood Products Training Package Version 2.0.

Application

This unit of competency describes the outcomes required to assess harvest sites and trees to be harvested and to plan and safely harvest trees using a chainsaw.

This unit covers the felling procedures for trees with a level of complexity that requires significant tree assessment and advanced practical felling skills.

Persons competent in this unit should be able to effectively fell trees of any size, species and condition, including those with significant defects and characteristics that cause excessive felling complexity, that are deemed safe to fell.

Trees typical to the scope of this unit including the following characteristics:

- lean and weight distribution which adds significant complexity yet can be assessed and adapted to site requirements
- larger dimensions relative to local forest size distribution
- substantial lean
- damage and/or defect that requires complex felling techniques
- multi legged, hollow butts, culls, stags
- species prone to free splitting and adverse reactions during falling
- single or complex multi stems
- diameter of tree greater than chainsaw bar length
- grown on terrain and slope that can add significant complexity to the operation

The unit applies to those felling trees in a commercial harvesting operation within a forest environment, producing forest products.

Licensing, legislative, regulatory, or certification requirements apply to this unit in some states & territories at the time of publication, and may differ according to jurisdiction

Pre-requisite Unit

Nil

Unit Sector

Harvesting and Haulage

Elements and Performance Criteria

Element	Performance Criteria
Elements describe the essential outcomes.	*Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.*
1. Prepare for felling	1.1 Identify and comply with applicable work health and safety (WHS), environmental, legislative and organisational requirements relevant to harvesting trees
	1.2 Identify and adhere to site environmental protection measures and harvest plan according to relevant legislation and regulations
	1.3 Review and check job requirements with appropriate personnel
	1.4 Select tools and equipment appropriate to work requirements and check for operational effectiveness according to manufacturer recommendations
	1.5 Sharpen and adjust chainsaw or change components according to manufacturer recommendations
	1.6 Assess tree and determine felling requirements
	1.7 Identify and control potential and existing risks and hazards in the work area
	1.8 Identify trees to be felled and retained and establish general falling direction
	1.9 Identify log extraction method and requirements
	1.10 Determine requirements for product quality
	1.11 Establish and maintain communication with others according to WHS requirements
2. Assess conditions and surroundings	2.1 Identify and comply with site environmental concerns according to relevant federal, state or territory legislation and local regulations
	2.2 Identify and assess environmental conditions according to harvesting plan
	2.3 Assess general factors affecting felling requirements and detect and control specific forest or site risks and hazards
3. Assess tree and plan felling	3.1 Locate and visually assess tree for felling characteristics
	3.2 Confirm tree is safe to fell

	3.3 Assess and check required falling direction and possible deviation
	3.4 Plan sequence of cuts to fell tree according to standard felling procedures and log quality requirements
	3.5 Select suitable escape route and clear of growth and other obstacles according to environmental care principles and statutory requirements
	3.6 Assess limitations of own skills in safely felling trees, identify trees considered outside own skill level and seek assistance from appropriate personnel where required
	3.7 Note and monitor location and activity of other personnel in the work area and modify activity where required
4. Fell trees of any size, species and condition	4.1 Fell individual trees using planned cutting techniques according to site conditions, extraction method and at a safe distance from other personnel in the work area
	4.2 Adjust cutting technique in response to movement and condition of tree
	4.3 Use planned escape route when tree starts to fall and monitor the fall and movement of tree on ground until determined stable
	4.4 Delay movement back into the felling area until all tree material, including from adjacent tree crowns, has fallen, and identify any dangerous tree branches that hang-up
	4.5 Identify and implement procedures for removal of trees that are hung-up
	4.6 Fell trees to meet production levels, log extraction methods and site requirements
	4.7 Dispose of waste materials in line with environmental and operational requirements
5. Maintain equipment	5.1 Detect, rectify and report blunt or damaged saw chain according to workplace procedures
	5.2 Monitor chainsaw for operational effectiveness and record and report faults, malfunctions and problems according to workplace procedures

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Numeracy skills to:	• estimate and measure tree dimensions, including height, length and diameter and volume • plan time efficient cutting patterns and sequences • report on size, length, diameter and grade of felled trees. • calculate product mass of individual trees and determine fall zone.
Oral communication skills to:	• select and use appropriate spoken communication strategies with work colleagues and other personnel on site when felling trees • interpret hand signals with other operators to ensure safe tree felling • ask questions to clarify contents of coupe plans.

Reading skills to:	• interpret:
	    • workplace health and safety, industry standards and regulations for felling trees and other relevant tree felling procedures
	    • work orders and coupe plans
	    • manufacturers' maintenance recommendations.

Writing skills to:	• complete forms to record WHS considerations for felling trees • report equipment faults and request maintenance of equipment. • complete log book requirements.
Planning and organising skills to:	• identify an unsafe tree. • efficiently and logically sequence the stages of preparation for and felling of trees using work order to guide activities.
Problem solving skills to:	• plan and apply the hierarchy of risk control • review and identify work requirements • recognise own limitations in conditions and trees for felling • identify problems and equipment faults and demonstrate appropriate response procedures.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPHAR3221 Harvest trees manually (advanced) Release 2	FPIHAR3221 Harvest trees manually (advanced) Release 1	Minor typographical errors corrected	Equivalent

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47

　　　　　　Skills Impact