FWPHAR3220 Harvest trees manually (intermediate)

Release: 1

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Modification History

Release	Comment
1	Replaces equivalent unit FPIHAR3220 Harvest trees manually (intermediate), which was first released with FPI11 Forest and Forest Products Training Package Version 1. This is the first release of this unit in the new standards format.

Application

This unit of competency describes the outcomes required to assess harvest sites and trees to be harvested and to plan and safely carry out manual tree-felling operations using a chainsaw.

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

Persons competent in this unit should be able to effectively fell most trees except very large trees, and/or those with significant defects and/or characteristics that cause excessive complexity.

It applies to trees that have a diameter greater than the bar length of the chainsaw.

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

- lean and weight distribution that can be assessed and readily adapted to falling direction with the use of wedges and/or control with hinge-wood
- various dimensions relative to local forest size distribution
- limited visible damage and/or defect
- species prone to free splitting and adverse reactions during felling
- single or multi-stems
- diameter of tree greater than chainsaw bar length
- grown on terrain and slope that can add complexity to the operation

The unit applies to 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

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. Determine harvesting requirements	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 according to harvesting plan and relevant legislation and regulations
	1.3 Review job requirements and check with appropriate personnel
	1.4 Identify log extraction method and requirements
	1.5 Identify requirements for product quality
	1.6 Determine harvesting requirements, and plan tree felling sequence and general falling directions
	1.7 Establish and maintain communication with others according to WHS requirements
2. Assess harvest site	2.1 Assess location and stability of harvest site for conditions likely to affect harvesting activities
	2.2 Identify and assess environmental conditions according to harvest plan
	2.3 Identify trees to be felled according to harvest plan
	2.4 Assess factors affecting harvesting requirements and detect and control specific forest or site risks and hazards
3. Visually assess trees and plan felling	3.1 Assess factors affecting harvesting requirements and detect and control specific forest or site risks and hazards
	3.2 Confirm tree is safe to fell
	3.3 Check planned falling direction and propose deviation if required
	3.4 Select cutting pattern to optimise time and manageable removal of sections
	3.5 Plan sequence of cuts to fell tree according to standard felling procedures and log quality 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 Select suitable escape route and clear of growth and other obstacles according to environmental care principles and statutory requirements
	3.8 Note and monitor location and activity of other personnel in the work area and modify activity where required
4. Prepare equipment	4.1 Select tools and equipment appropriate to work requirements and check for operational effectiveness according to manufacturer recommendations
	4.2 Sharpen and adjust chainsaw or change components according to manufacturer recommendations
	4.3 Sharpen and adjust chainsaw or change components according to manufacturer recommendations
5. Fell trees	5.1 Fell individual trees using selected cutting techniques according to WHS and job requirements
	5.2 Adjust cutting technique in response to movement and condition of tree
	5.3 Use planned escape route when tree starts to fall and monitor the fall and movement of tree on ground until determined stable
	5.4 Delay movement back into the felling area until all tree material, including from adjacent tree crowns, has fallen
	5.5 Identify and implement procedures for removal of trees that are hung-up
	5.6 Fell trees to meet production levels, log extraction methods and site requirements
	5.7 Dispose of waste materials in line with environmental and operational requirements
6. Maintain equipment	6.1 Inspect equipment on completion of harvesting activities
	6.2 Identify damaged saws and cutting attachments for repair or replacement according to organisational requirements and manufacturer recommendations
	6.3 Remove, clean, adjust or replace chain and other components according to manufacturer recommendations
	6.4 Maintain tools and equipment according to WHS requirements and manufacturer recommendations

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 • determine tree fall zone according to tree mass • plan time efficient cutting patterns and sequences. • calculate product mass of individual trees and determine fall zone
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

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Range of Conditions

Not Applicable

Unit Mapping Information

FPIHAR3220 Harvest trees manually (intermediate).

Links

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