



Australian Government

FWPCOT5209 Manage tree harvesting to minimise environmental impact

Release: 1

FWPCOT5209 Manage tree harvesting to minimise environmental impact

Modification History

Release	Comment
1	Replaces equivalent unit FPICOT5209B Manage tree harvesting to minimise environmental impact which was first released with FPI11 Forest and Forest Products Training Package Version 2.2

Application

This unit of competency describes the outcomes required to plan and manage tree harvesting to minimise environmental impact and by-product while maximising yields. It applies to a variety of settings including forest environment (native and plantation), agroforestry and farm forestry.

The unit applies to job roles including Environmental Planner and Manager, Forest/Timber Harvester, Forest Planner, Forest Sustainability Manager, Forestry Manager, Plantation Manager, Sustainability Manager, and Technical Forester.

No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Common Technical

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>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.</i>
1. Develop tree harvesting plan	1.1 Analyse workplace health and safety (WHS), environmental and regulatory requirements for the design and operation of harvest activities.

ELEMENTS	PERFORMANCE CRITERIA
	1.2 Research and analyse tree harvesting requirements. 1.3 Consult stakeholders as an integral part of the planning process. 1.4 Identify and calculate available timber. 1.5 Develop tree harvesting plan to ensure maximum yields while minimising environmental impact and by-product. 1.6 Gain approval for plan and inform work teams.
2. Initiate pre-harvesting activities	2.1 Select appropriate personal protective and other equipment and check for operational effectiveness. 2.2 Install or identify buffer zones, protected areas and erosion control measures. 2.3 Acquire resources in line with plan requirements, and estimate equipment and resource requirements. 2.4 Apply for and gain planning permits and access permission.
3. Manage tree harvesting operations	3.1 Manage harvesting operational activities to comply with environmental and organisational requirements. 3.2 Monitor sustainability indicators for compliance with sustainability plan. 3.3 Rectify reported exceptions to work order and tree harvesting plan within legislative and planned timeframes.
4. Review tree harvesting operations	4.1 Report sustainability indicators for all harvesting stages, including pre- and post-harvesting, in line with organisational and contractual requirements. 4.2 Report performance indicators to appropriate stakeholders in line with legislative and contractual requirements. 4.3 Report sufficient feedback to provide data for assistance with planning of future harvesting.
5. Review tree harvesting plan	5.1 Analyse data from tree harvesting operations to assist with planning future harvesting operations. 5.2 Implement techniques to review effectiveness of harvesting operations in maximising yields and minimising environmental impact and by-product. 5.3 Use information to change harvesting plan as required.

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:	Complete a range of complex calculations involving gross and nett spatial areas and volumes of extraction.
Oral communication skills to:	- Clearly represent complex harvest plans to others. - Ask open and closed probe questions and actively listen to: - engage in a consultative process with others to generate and refine ideas - seek feedback on proposed plan inclusions.
Reading skills to:	- Interpret complex and unfamiliar: - regulatory and environmental information affecting harvest plans - local authority zoning and approval documents.
Writing skills to:	- Document detailed and accurate harvesting plans and reports. - Complete detailed approval applications.
Planning and organising skills to:	Plan and organise collection of all required information and manage own timing and productivity to complete plans and harvesting operations within deadlines.
Technology skills to:	Use computers and software programs for documenting harvest plans and reports.

Unit Mapping Information

FPICOT5209B Manage tree harvesting to minimise environmental impact

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPCOT5209 Manage tree harvesting to minimise environmental impact

Modification History

Release	Comment
1	Replaces equivalent unit FPICOT5209B Manage tree harvesting to minimise environmental impact which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including 'Required Skills and Knowledge, Evidence Guide and Range Statement'.

Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit, and must be able to provide evidence that they can:

- Develop a comprehensive written tree harvesting plan, to incorporate the following inclusions:
 - sustainability indicators
 - sustainability plan
 - workplace health and safety monitoring systems
 - certification scheme requirements
 - coupe size
 - calculation of available timber
 - key performance indicators
 - human resource requirements, equipment and resource requirement estimates
 - planning permits and access permission requirements
 - staff and contract work orders.
- Manage the harvesting operations according to the harvesting plan.
- Complete a post-harvesting report to include performance against key performance and sustainability indicators.

Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- Key content and application of applicable commonwealth, state, territory or local government regulations and codes of practice relevant to harvest operations.

- Key content of applicable certification schemes, including:
 - Forest Stewardship Council
 - Australian Forestry Standard
 - ISO standards for environmental and other management systems.
- Land use zoning and land owning approval processes.
- Environmental protection practices for forest settings, including:
 - minimising temporary, short-term, long-term and permanent damage to natural vegetation and landscape
 - soil and water protection
 - safe disposal of waste material
 - cleaning plant, tools and equipment.
- Key sustainability indicators, including:
 - water quality
 - soil condition
 - native flora and fauna protection
 - maintenance of culturally significant landscapes, natural or anthropogenic formations and constructions.
- Principles of harvest planning and format, content and use of plans
- Methods used to calculate gross and net spatial areas and volumes of extraction
- Considerations for determining buffer zones, protected areas and erosion control measures
- Harvesting and extraction methods used to maximise yields while minimising environmental impact and by-product
- Workplace health and safety hazards, risks and control measures
- Organisational standards, policies and procedures for the design and operation of harvest activities, including:
 - workplace health and safety for harvesting operations
 - environmental protection
 - documenting harvesting plans
 - communication reporting lines for plans and reports.

Assessment Conditions

The following resources must be made available:

- Access to a coupe to conduct a harvesting operation
- Computers and software programs used for documenting harvesting plans and reports.
- Applicable commonwealth, state, territory or local government regulations and codes of practice relevant to harvest operations.
- Topographic maps for the site.
- Information on land use zonings and application forms.
- Documents and proformas commonly used for:
 - harvesting plans
 - post-harvesting reports

- Organisational standards, policies and procedures for the design and operation of harvest activities.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- Hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.
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