



Australian Government

Department of Education, Employment and Workplace Relations

FPIFGM2204B Plant trees mechanically

Release: 1

FPIFGM2204B Plant trees mechanically

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to undertake forest planting operations mechanically. It includes the selection and planting of suitable tree stock, and the use and maintenance of equipment

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

This unit replaces FPIFGM2204A Plant trees mechanically

Application of the Unit

Application of the unit

The unit involves planting trees mechanically in a forest environment setting

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for planting operations	1.1. Applicable occupational health and safety (OHS), environmental, legislative and organisational requirements relevant to planting trees mechanically are identified and followed 1.2. Planting requirements and factors are identified from work order and applied in line with site and quality control requirements 1.3. Pre-startup checks are completed on equipment in line with manufacturer recommendations 1.4. Suitable personal protective equipment and clothing are selected and used 1.5. Potential and existing risks, hazards and site conditions are identified and assessed in line with OHS and environmental requirements 1.6. Planting stock is stored and prepared for planting in line with operational requirements 1.7. Communication with others is established and maintained in line with OHS requirements
2. Plant forest trees	2.1. Tree stock is selected and plant site prepared in line with job and quality requirements 2.2. Tree stock is planted in line with production target, quality, safety and specific job requirements 2.3. Work methods and patterns are selected to suit particular operation and make efficient use of equipment and available time and resources 2.4. Problems are identified and resolved in line with site procedures and environmental requirements 2.5. Equipment is maintained and stored in line with manufacturer recommendations and workplace procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Required skills

- Technical skills sufficient to use and maintain relevant planting equipment;

REQUIRED SKILLS AND KNOWLEDGE

recognise common diseases, pests and nutrition deficiencies; efficiently and safely select and handle tree stock

- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others
- Literacy skills sufficient to locate, record and report information
- Numeracy skills sufficient to measure, estimate and calculate time required to complete a task
- Problem solving skills sufficient to review and identify work requirements; identify problems and equipment faults; demonstrate appropriate response procedures

Required knowledge

- Applicable commonwealth, state or territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for planting trees mechanically
- Environmental protection requirements, including the safe disposal of waste material, returning the environment to its original or near to original condition on completion of activity and minimising carbon emissions
- Organisational and site standards, requirements, policies and procedures for planting trees mechanically
- Environmental risks and hazards
- Role of wood or waste products in generating renewable energy through biomass
- Typical stock defects, including pests, diseases and nutrition deficiencies
- Techniques for operating in forest settings
- Procedures for pre-operational checks on equipment
- Established communication channels and protocols
- Problem identification and resolution strategies, and common fault finding techniques
- Types of tools and equipment, and procedures for their safe use and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently plant trees mechanically in line with job and environmental requirements

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable commonwealth, state or territory legislative and regulatory requirements and codes of practice relevant to planting trees mechanically
- following organisational policies and procedures relevant to planting trees mechanically
- planting tree stock mechanically with minimal handling, while adapting work methods or patterns to suit particular operation
- identifying and resolving problems, including potential site or equipment hazards, unsuitable planting stock, pests, disease and nutrition deficiencies

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions

EVIDENCE GUIDE

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge
- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

RANGE STATEMENT

OHS requirements:

are to be in line with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices, including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements
may include:**Legislative requirements:**

are to be in line with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements
may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement processes

RANGE STATEMENT

	- and standards • OHS, emergency and evacuation procedures • ethical standards • recording and reporting requirements • equipment use, maintenance and storage requirements • environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
Planting requirements may include:	• planting site and environmental requirements • examination of stock sampling • examination and assessment criteria
Factors may include:	• planting depth • spacing • root placement • firmed vertical and undamaged • position of seedling in row
Equipment may include:	• planting machine • tube planter • planting frame • harness • box seedlings • auger • personal protective equipment
Communication may include:	• verbal and non-verbal language • constructive feedback • active listening • questioning to clarify and confirm understanding • use of positive, confident and cooperative language • use of language and concepts appropriate to individual social and cultural differences • control of tone of voice
Preparation may include:	• hole depth • hole width • cultivation
Planted may include:	• minimal handling of tree stock to minimise foliage and root damage • monitoring planting to ensure quality

RANGE STATEMENT**Methods** may include:

- feeding tree stock into the planting machine where required

Problems may include:

- equipment faults and malfunctions
- unsuitability of stock
- common diseases, pests and nutrition deficiencies
- communication misunderstandings
- environmental issues or damage
- production quality
- safety

Unit Sector(s)

Not Applicable

Competency field**Competency field**

Forest Growing and Management