



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FPIHAR2206B Operate a mobile chipper/mulcher**

**Release: 1**

## **FPIHAR2206B Operate a mobile chipper/mulcher**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit descriptor**

This unit describes the outcomes required to operate a mobile chipping/mulching unit to clean up after felling operations and chip excess branches and timber refuse

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 FPIHAR2206A Operate a mobile chipper/mulcher

### **Application of the Unit**

#### **Application of the unit**

The unit involves operating a mobile chipper/mulcher in a forest and forest products 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**

#### **Prerequisite units**

## 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 mobile chipping/mulching	<p>1.1. Applicable <i>Occupational Health and Safety</i> (OHS), <i>environmental</i>, <i>legislative</i> and <i>organisational requirements</i> relevant to operating a mobile chipper/mulcher are identified and followed</p> <p>1.2. <i>Work order</i> is reviewed and checked with <i>appropriate personnel</i></p> <p>1.3. Type and quantity of <i>timber refuse</i> to be <i>chipped/mulched</i> are identified and assessed for safe working conditions</p> <p>1.4. Timber refuse assessed as not suitable for chipping/mulching is set aside for recycling or re-use in line with site procedures</p> <p>1.5. <i>Equipment</i> is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations</p> <p>1.6. Chipping/mulching activities are planned in line with site procedures, environmental requirements</p> <p>1.7. <i>Communication</i> with others is established and maintained in line with OHS requirements</p>
2. Chip/mulch timber	<p>2.1. <i>Chipping/mulching unit</i> is positioned, secured and set up in line with manufacturer's specifications</p> <p>2.2. <i>Pre start-up checks</i> are carried out on equipment in line with site requirements</p> <p>2.3. Timber refuse is fed into the chipper/mulcher at a rate applicable to the <i>capacity</i> of the machinery in line with applicable safe handling techniques</p> <p>2.4. Timber refuse is chipped to the <i>chip sizes</i> set on the chipping unit and in line with the work order</p> <p>2.5. Chipping/mulching processes and equipment faults are <i>recorded and reported</i> to the appropriate personnel</p>
3. Conduct operator maintenance	<p>3.1. Equipment lock-out procedures are followed in line with OHS legislation and site procedures</p> <p>3.2. Chipper/mulcher is checked for blunt or damaged condition</p> <p>3.3. Components are removed, maintained, adjusted and replaced in line with manufacturer's recommendations</p> <p>3.4. Chipper/mulcher set-up is assessed and adjusted to suit chipping conditions</p>

**ELEMENT****PERFORMANCE CRITERIA**

- 3.5. Chipper/mulcher is kept clear of *foreign matter* and checked to ensure it meets relevant standards prior to use

## 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 tools, machinery and equipment; efficiently and safely operating a mobile chipper/mulcher
- Communication skills and interpersonal techniques sufficient to interact appropriately with colleagues and others in the workplace
- Literacy skills sufficient to accurately locate, record and report information
- Numeracy skills sufficient to estimate measure and calculate time required to complete a task
- Problem solving skills sufficient to review and accurately identify work requirements; identify problems and equipment faults and 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 operating a mobile chipper/mulcher
- Environmental protection requirements, including the safe disposal of waste material and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for operating a mobile chipper/mulcher
- Characteristics of trees and timber defects
- Chipping/mulching procedures
- Mobile chipper/mulcher operation and safety
- Chipper/mulcher condition assessment
- Social/community benefit of uses for chipped/mulched timber
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their use, operation and maintenance
- Appropriate mathematical procedures for estimating and measuring, including

**REQUIRED SKILLS AND KNOWLEDGE**

calculating time to complete tasks

- Procedures for recording and reporting workplace records and 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 operate a mobile chipper/mulcher within organisational 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 operating a mobile chipper/mulcher
- following organisational policies and procedures relevant to operating a mobile chipper/mulcher
- operating a mobile chipper/mulcher in line with the work order and within prescribed organisational tolerances
- conducting operator maintenance on a mobile chipping unit

### 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

### Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and

## EVIDENCE GUIDE

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. **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.

**OHS requirements:** are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and



## RANGE STATEMENT

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 and standards
- OHS, emergency and evacuation procedures

## RANGE STATEMENT

- ethical standards
  - recording and reporting requirements
  - equipment use and maintenance and storage requirements
  - environmental management requirements (waste disposal, recycling and re-use guidelines)
- Work order** is to include:
- instructions for the chipping/mulching and despatch of chipped/mulched timber refuse from the work site
- and may include:
- type
  - size
  - length
  - quantity
  - grade
- and may also include:
- instructions for the environmental monitoring of work and procedures
  - environmental care requirements relevant to the work
- Appropriate personnel** may include:
- supervisors
  - suppliers
  - clients
  - colleagues
  - managers
- Timber refuse** may include:
- branches
  - tree heads
  - bark
  - other timber waste
- Chipping/mulching** is the process of converting timber refuse into varying chip sizes using mechanised chipping/mulching units
- Equipment** may include:
- mobile chipping/mulching units
  - specific safety attire
  - maintenance tools and equipment
- and is to include procedures for equipment lock-out, such as protecting operators and co-workers from accidental injury by isolating the

## RANGE STATEMENT

	machine
<b>Communication</b> may include:	<ul style="list-style-type: none"> <li>• verbal and non-verbal language</li> <li>• hand or other agreed signals</li> <li>• eye contact with other operators or personnel</li> <li>• active listening</li> <li>• questioning to clarify and confirm understanding</li> <li>• use of electronic communication devices</li> </ul>
<b>Chipping/mulching</b> unit may include:	<ul style="list-style-type: none"> <li>• a truck mounted chipping/mulching unit or trailer mounted chipping/mulching unit feeding into a truck or other form of transportation</li> </ul> <p>and is usually petrol driven, with high powered spinning cutters which shred timber refuse into chips/mulch</p>
<b>Pre start-up checks</b>	<p>are conducted to ensure:</p> <ul style="list-style-type: none"> <li>• equipment has been set-up correctly</li> <li>• systems are performing accurately and operating to optimum performance</li> </ul>
<b>Capacity</b> may include:	<ul style="list-style-type: none"> <li>• the capacity of the machinery to cope with certain size diameters of branch</li> <li>• the speed by which waste is fed into the chipper/mulcher</li> </ul>
<b>Chip sizes</b>	may vary in size, dependent on the customer or work order and the capability of the chipper/mulcher to set chip sizes
<b>Records and reports</b> may include:	<ul style="list-style-type: none"> <li>• timber type</li> <li>• size</li> <li>• outcomes</li> <li>• storage locations</li> <li>• quality outcomes</li> <li>• hazards</li> <li>• incidents</li> <li>• equipment malfunctions</li> </ul> <p>and may be compiled manually or by using a computer-based system or another appropriate organisational communication system</p>
<b>Foreign matter</b> may include:	<ul style="list-style-type: none"> <li>• contamination of chip</li> <li>• stones</li> </ul>

**RANGE STATEMENT**

- rocks
- metal
- other foreign matter which may blunt the cutters or affect operation of the chipper/mulcher

**Unit Sector(s)**

**Unit sector** No sector assigned

**Co-requisite units**

**Co-requisite units**

**Competency field**

**Competency field** Harvesting and Haulage