



Australian Government

Department of Education, Employment and Workplace Relations

FPIHAR3215C Operate a heavy production mobile chipper

Release: 1

FPIHAR3215C Operate a heavy production mobile chipper

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to operate a heavy production mobile chipping unit to chip logs or tree lengths on-site during forest harvesting operations

Compliance with licensing, legislative, regulatory or certification requirements may be required in various jurisdictions

This unit replaces FPIHAR321B Operate a heavy production mobile chipper

Application of the Unit

Application of the unit

The unit involves operating a heavy production mobile chipping unit in a forest environment

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. Plan and prepare for chipping	<p>1.1. Applicable <i>Occupational Health and Safety (OHS), environmental, legislative and organisational requirements</i> relevant to operating a heavy production mobile chipping unit are identified and followed</p> <p>1.2. Site <i>environmental protection measures</i> are adhered to in line with relevant legislation and regulations</p> <p>1.3. <i>Work order</i> is reviewed and checked with <i>appropriate personnel</i></p> <p>1.4. Type and quantity of <i>timber</i> to be chipped is identified and assessed for safe working conditions</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. <i>Chipping</i> activities are planned in line with site procedures and <i>environmental and heritage concerns</i></p> <p>1.7. <i>Communication</i> with others is established and maintained in line with OHS requirements</p>
2. Chip timber	<p>2.1. All work is conducted in line with work order, environmental and OHS requirements</p> <p>2.2. <i>Chipping unit</i> is positioned, secured and set up in line with manufacturer's specifications</p> <p>2.3. <i>Pre start-up checks</i> are carried out on equipment in line with manufacturer's recommendations and site requirements</p> <p>2.4. Site <i>hazards</i> associated with heavy production mobile chipper operations are detected and safe operating techniques are used to minimise risk</p> <p>2.5. Timber is fed into the chipper at a rate applicable to the <i>capacity</i> of the machinery and product quality</p> <p>2.6. Timber is chipped to the <i>chip sizes</i> set on the chipping unit in line with the work order</p> <p>2.7. Chipped timber is fed into the back of a truck or other modes of <i>transportation</i></p> <p>2.8. Communication with others is maintained in line with OHS requirements</p> <p>2.9. <i>Emergency plan procedures are</i> followed <i>in line with OHS, environmental, legal and site requirements</i></p>

ELEMENT	PERFORMANCE CRITERIA
3. Carry out machine operator maintenance	3.1. Equipment lock-out procedures are followed in line with OHS legislation and site procedures 3.2. Chipper is checked for blunt or damaged condition 3.3. Components are removed, maintained, adjusted and replaced in line with manufacturer's recommendations 3.4. Chipper set-up is assessed and adjusted to suit chipping conditions 3.5. Chipper is kept clear of <i>foreign matter</i> and checked to ensure it meets relevant standards prior to use 3.6. Chipping processes and equipment faults are <i>recorded and reported</i> to appropriate personnel

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 operate a heavy production mobile chipper, effectively assess condition of chipper
- Communication skills and interpersonal techniques sufficient to interact appropriately with colleagues and others in the workplace
- Literacy skills sufficient to accurately record and maintain workplace information, and documentation
- Numeracy skills sufficient to estimate, measure and calculate time required to complete a task
- Problem solving skills sufficient to 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 heavy production mobile chipper
- 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 heavy production mobile chipper

REQUIRED SKILLS AND KNOWLEDGE

- Characteristics of trees and timber defects
- Heavy production chipping procedures
- Heavy production mobile chipper operation and safety
- Chip types and quality
- 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 including equipment safety requirements
- 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 operate a heavy production mobile chipper in line with 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 heavy production mobile chipper
- following organisational policies and procedures relevant to operating a heavy production mobile chipper
- communicating and working safely with others in the work area
- operating a heavy production mobile chipper in line with the work order and within prescribed organisational tolerances
- conducting operator maintenance on a heavy production 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

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
- heritage and traditional land owner issues

Organisational requirements may include:

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

RANGE STATEMENT

- quality and continuous improvement processes and standards
- OHS, emergency and evacuation procedures
- ethical standards
- recording and reporting requirements
- equipment use and maintenance and storage requirements
- environmental management requirements (waste disposal, recycling and re-use guidelines)

Environmental protection measures

may include action to limit the impact to:

- ground growth and canopy
- soil and water

may include action to limit the impact of:

- general forest lean
- wind speed and direction
- fallen trees
- density of trees
- ground slope
- ground hazards
- obstacles

Work order is to include:

- instructions for the chipping and despatch of chipped timber from the work site

and may include:

- type
- size
- length
- quantity
- grade
- 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 may include:

- complete logs

RANGE STATEMENT

- Equipment** may include:
- log segments
 - whole trees
 - tree heads
 - heavy production mobile chipping units
 - specific safety attire
 - maintenance tools and equipment
- and is to include:
- procedures for equipment lock-out, i.e. protecting operators and co-workers from accidental injury by isolating the machine
- Chipping** is the process of converting timber into varying chip sizes using mechanised chipping units, useable on-site during forestry harvesting operations
- Environmental and heritage concerns** may include:
- dust
 - noise
 - water
 - flora and fauna
 - heritage legislation
 - culturally sensitive sites and artefacts
 - plantations
 - native forest
- Communication** may include:
- verbal and non-verbal language
 - hand or other agreed signals
 - eye contact with other operators or personnel
 - active listening
 - questioning to clarify and confirm understanding
 - use of electronic communication devices
- Chipping unit** may include:
- heavy production mobile chipping units including:
 - truck mounted heavy production chipping units
 - trailer mounted chipping units
 - independently driven motorised mobile chipping units feeding into a truck or other form of transportation
 - petrol or diesel driven units that contain high powered spinning cutters which cut timber into chips

RANGE STATEMENT

Pre start-up checks

are conducted to ensure:

- equipment has been set-up correctly
- systems are performing accurately and operating to optimum performance

Hazards may include:

- uneven/unstable terrain
- trees
- fires
- overhead and underground services
- bridges
- buildings
- excavations
- traffic
- embankment
- cuttings
- structures and hazardous materials

Capacity

is the capacity of the machinery to cope with certain size diameters of log or branch or the speed by which timber is fed into the chipper

Chip sizes

may vary, dependent on the customer or work order and the capability of the chipper

Transportation may include:

- high trailers
- trucks
- rail cars
- other applicable forms of transport

Emergency plan may include:

- notification of authorities
- evacuation procedures
- isolation procedures
- equipment shut-down procedures
- clean up
- first aid
- use of personal protective equipment and clothing
- guarding
- access and exit

Foreign matter

is the contamination of chip, stones, rocks, metal and other foreign matter which may blunt the cutters or affect operation of the chipper

Records and reports may

- timber type, size

RANGE STATEMENT

include:

- quality outcomes
- storage locations
- quality outcome
- hazards
- incidents or equipment malfunctions

and may be:

- manual
- using a computer-based system or another appropriate organisational communication system

Unit Sector(s)

Not Applicable

Competency field

Competency field Harvesting and Haulage