



**Australian Government**

# **FWPHAR3204 Operate split flail and wood chipper fed by mobile machine**

**Release: 1**

# FWPHAR3204 Operate split flail and wood chipper fed by mobile machine

## Modification History

| Release   | Comments                                                                              |
|-----------|---------------------------------------------------------------------------------------|
| Release 1 | This version released with FWP Forest and Wood Products Training Package Version 6.0. |

## Application

This unit of competency describes the skills and knowledge required to operate a split flail and wood chipper fed by a mobile machine in an infield wood chipping operation. This unit includes preparing for infield wood chipping activities, conducting pre-operational machinery checks, setting up machinery, loading whole trees and logs with mobile machine, monitoring machine operations, and implementing machine maintenance.

The unit applies to individuals who work as infield wood chipping machine operators in a commercial forest or land clearing settings.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

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

## Pre-requisite Unit

Nil

## Unit Sector

Harvesting and Haulage (HAR)

## 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.</i>                           |
| 1. Prepare for infield wood chipping activities  | 1.1 Determine job requirements from work order or instruction and, where required, seek clarification from appropriate personnel |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                  | <p>1.2 Confirm production targets and assess wood flow requirements to ensure efficient machine operation and overall productivity</p> <p>1.3 Confirm safety and environmental requirements for the task according to workplace procedures</p> <p>1.4 Identify, assess and take actions to mitigate risks and hazards associated with machine operations</p> <p>1.5 Identify emergency plan procedures to follow in the event of an emergency</p> <p>1.6 Identify type and quantity of material to be chipped, and quality requirements for chipped material</p> <p>1.7 Plan infield wood chipping activities according to work order or instruction</p> <p>1.8 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace</p> <p>1.9 Select, fit and use personal protective equipment</p> <p>1.10 Conduct pre-operational machinery checks according to manufacturer recommendations and workplace procedures</p> |
| 2. Set up split flail and wood chipper           | <p>2.1 Determine an appropriate location for flail and wood chipper</p> <p>2.2 Position flail and chipper according to work requirements, manufacturer instructions, terrain characteristics, workflow and workplace safety requirements</p> <p>2.3 Secure and set up flail and chipper according to work requirements, manufacturer instructions and workplace safety requirements</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 3. Flail and chip whole trees and logs           | <p>3.1 Assess whole trees and logs and dispose of or recycle material unsuitable for chipping according to environmental protection practices, quality requirements and workplace procedures</p> <p>3.2 Operate flail/chipper at feed rate applicable to safety and stability of machine, characteristics of material to be chipped, chip quality, capacity of flail and chipper and loading capacity of transport vehicles</p> <p>3.3 Operate flail/chipper safely and efficiently to avoid harm to people, flail/chipper, other machines and the environment</p> <p>3.4 Confirm all merchantable product from the site is loaded into flail/chipper and all waste is managed according to work plan</p> <p>3.5 Chip flailed material to chip sizes and bark allowances specified in</p>                                                                                                                                                                               |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                  | <p>work order</p> <p>3.6 Monitor output for compliance with flail and chip specifications</p> <p>3.7 Confirm safety of self and others and monitor location of people in relation to flail and chipper while machines are in operation</p> <p>3.8 Load chipped material into transport vehicles if applicable according to vehicle load and distribution requirements and load covering requirements</p> <p>3.9 Respond to critical situations requiring emergency shutdown to prevent personal injury or damage to machine or product</p>                                    |
| 4. Carry out operator maintenance                | <p>4.1 Lock out machine according to workplace safety and manufacturer requirements</p> <p>4.2 Access tools and service equipment required for performing routine maintenance according to manufacturer instructions</p> <p>4.3 Check flail chains, chipper knives, counter knives and anvil for wear and damage at appropriate or recommended intervals</p> <p>4.4 Complete operator maintenance tasks according to manufacturer recommendations and workplace procedures</p> <p>4.5 Record and report production outcomes and equipment faults to appropriate personnel</p> |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.*

| Skill    | Description                                                                                                                                                                      |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading  | <ul style="list-style-type: none"> <li>Interpret workplace documentation to determine requirements</li> </ul>                                                                    |
| Writing  | <ul style="list-style-type: none"> <li>Use technical and workplace specific vocabulary to accurately and legibly complete workplace records and forms</li> </ul>                 |
| Numeracy | <ul style="list-style-type: none"> <li>Interpret numerical and graphical information shown on machine screens, displays and gauges relevant to safe machine operation</li> </ul> |

## Unit Mapping Information

| Code and title<br>current version                                              | Code and title<br>previous version                            | Comments                                                                                                                                                                                 | Equivalence status |
|--------------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| FWPHAR3204<br>Operate split flail and<br>wood chipper fed by<br>mobile machine | FWPHAR3215<br>Operate a heavy<br>production mobile<br>chipper | Redesigned unit using<br>content from<br>FWPHAR3215 Operate a<br>heavy production mobile<br>chipper to provide specific<br>skills for specialised<br>in-field wood chipping<br>equipment | Not Equivalent     |

## Links

Companion Volumes, including Implementation Guides, are available at VETNet: -  
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

# Assessment Requirements for FWPHAR3204 Operate split flail and wood chipper fed by mobile machine

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## Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- planned, prepared and operated a split flail and wood chipper fed by mobile machine in an infield wood chipping operation according to a work order or instructions
- carried out routine machine inspection/maintenance on start-up and shutdown of operations.

## Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- information and requirements contained in a production plan and site safety and environmental management plans
- health of safety requirements related to operating a split flail and wood chipper fed by a mobile machine in infield wood chipping operations:
  - hazardous or safe working zones
  - workplace hazards and risks associated with the operation
  - factors that can change or introduce new hazards
  - risk control measures
  - legal obligations and industry standards and/or codes of practice related to the operation
  - warning signs and their correct positioning
  - vehicle-to-vehicle communication systems and procedures to maintain communication and workplace safety during operations
  - emergency response procedure and firefighting resources
- environmental care related to infield wood chipping operations:

- potential impacts of operation on onsite and offsite environmental values (cultural heritage, flora, fauna, ground compaction, water contamination and soil erosion)
- control measures, restrictions, legal obligations and industry standards and codes of practice requirements related to the operation
- procedures for safe operation of split flail and wood chipper:
  - pre-operational checks and detect faults
  - machine stability in different terrain conditions and slopes
  - shut down
- factors and their effects on the stability and operation of split flail and wood chipper:
  - slope and terrain conditions
  - machine specifications and restrictions
- reporting requirements regarding site, incident and hazard, personal reporting, check-in, production, and machine maintenance
- woodchip specifications
- features of split flail and wood chipper:
  - static/mobile
  - chains, knives and anvils
  - machine components
  - machine capacity
  - machine preparation and positioning
- procedures for loading chips into truck for transport
- mass and load covering requirements of transport vehicles
- techniques for determining and optimising feed rate
- influences on feed rate for flail/chipper:
  - machine capacity
  - type and condition of timber
  - product type and quality requirements
  - loading capacity of transport vehicles
- machine maintenance, servicing requirements and procedures for removing, replacing and disposing of chains and cutters.

## Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
  - skills must be demonstrated in an infield wood chipping setting
- resources, equipment and materials:
  - split flail and wood chipper
  - mobile machine to feed flail and chipper
  - whole trees and logs to be chipped

- personal protective equipment required in infield wood chipping operations
- vehicle-to-vehicle communication system
- truck to load if applicable
- specifications:
  - access to work order or instruction detailing infield wood chipping activities to be carried out by operator
  - access to workplace safety and environmental protection policies and procedures applicable to infield wood chipping operations
  - access to production plan
  - access to workplace safety and environmental protection plans
  - access to site emergency procedure
  - access to workplace safe operating procedures or operator manual for split flail and wood chipper
  - access to user manual for vehicle-to-vehicle communication system.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

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