



Australian Government

FWPSIL3003 Use mechanised equipment for forestry site preparation

Release: 1

FWPSIL3003 Use mechanised equipment for forestry site preparation

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 7.0.

Application

This unit of competency describes the skills and knowledge required to perform forestry site preparation activities using mechanised equipment.

Individuals seeking to undertake this unit should have prior experience or competency in *operating a bulldozer, excavator, skidder or tractor*.

The unit applies to individuals who use forestry machines for forestry site preparation operations.

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

Silviculture (SIL)

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 site preparation 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>
	1.2 Confirm safety and environmental protection requirements, including use of personal protective equipment, for the task according to workplace procedures 1.3 Identify, assess and take actions to mitigate risks and hazards associated with using mechanised equipment for forestry site preparation 1.4 Identify emergency plan procedures 1.5 Identify location of site preparation task and plan site preparation activities according to work order or instruction 1.6 Consult with appropriate personnel to ensure that work is coordinated effectively with others in the workplace 1.7 Select and check the serviceability of mechanised equipment and ground-engaging attachments required for site preparation task 1.8 Check positioning of warning signs and operation of vehicle-to-vehicle communication systems to maintain communication and workplace safety during forestry site preparation operations
2. Prepare forestry site using mechanised equipment	2.1 Carry out pre-start and start-up machine checks according to manufacturer instructions and workplace procedures 2.2 Identify machine faults or defects and rectify or report within scope of own responsibility according to workplace procedures 2.3 Drive, control and manoeuvre machine with ground-engaging attachments, to perform site preparation activities according to equipment capabilities, site characteristics and work order or instructions 2.4 Engage and disengage attachment according to manufacturer instructions and workplace procedures 2.5 Identify, remove or manage contaminants according to workplace procedures 2.6 Monitor and manage machine performance using appropriate indicators to ensure efficiency of operations 2.7 Carry out and monitor site preparation activities to ensure compliance with work order and environment protection requirements 2.8 Monitor hazards and risks during operations and ensure safety of self, other personnel, plant and equipment 2.9 Park, shut down, secure and carry out post-operational inspection of machine according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	2.10 Complete report on site preparation activities and forward to appropriate personnel
3. Carry out operator maintenance	3.1 Lock out machine according to workplace safety and manufacturer requirements 3.2 Access tools and service equipment required for performing routine maintenance according to manufacturer instructions 3.3 Check machine and ground-engaging attachments for wear and damage and perform operator maintenance tasks according to manufacturer recommendations and workplace procedures 3.4 Complete maintenance records according to manufacturer and workplace requirements.

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	Interpret workplace documentation to determine work requirements
Writing	Use technical and enterprise specific vocabulary to accurately and legibly complete workplace records and forms
Oral communication	Ask questions to clarify contents of production plans
Numeracy	Interpret numerical and graphical information shown on screens, displays and gauges

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSIL3003 Use mechanised	FWPHAR3233 Use mechanised	New title Minor edits to	Not equivalent

equipment for forestry site preparation	equipment for forestry site preparation on steep slope	Performance Criteria New Performance Evidence and added item in Knowledge Evidence	
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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 FWPSIL3003 Use mechanised equipment for forestry site preparation

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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 the individual has prepared one forestry site using one item of mechanised equipment and relevant ground engaging attachments selected from:

- bulldozer
- excavator
- skidder
- tractor.

In undertaking this activity, the individual has:

- used two of the following forestry site preparation methods:
 - mounding
 - scaling
 - scarification
 - disc trenching
 - shearing
 - piling
 - bedding
 - ploughing
 - raking
 - ripping
 - drum chopping
 - disking
 - scalping
 - mulching
- conducted the forestry site preparation activities on one of the following terrain types:
 - flat terrain

- steep slopes
- carried out routine maintenance on the selected mechanical equipment and attachments
- complied with environmental and safety standards, including use of personal protective equipment (PPE)

recorded and reported production outcomes, equipment faults and operator machine maintenance activities.

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 in production, site safety and environmental management plans relevant to forest site preparation operations
- industry standards, codes of practice and guidelines for forest site preparation operations, and their requirements as outlined in site safety and environmental management plans
- safe work procedures and safe working zones in forest site preparation operations
- hazards and risks related to operating mechanised equipment for forestry site preparation, and factors that can change or introduce new hazards
- types and correct positioning of warning signs, vehicle-to-vehicle communication systems and procedures to maintain communication and workplace safety during forestry site preparation operations
- firefighting and emergency response procedures
- potential environmental impacts of forestry site preparation activities on:
 - cultural heritage
 - flora
 - fauna
 - ground compaction
 - water contamination
 - soil erosion
- forestry site preparation activities:
 - mounding
 - scaling
 - scarification
 - disc trenching
 - shearing
 - piling
 - bedding
 - ploughing
 - raking
 - ripping
 - drum chopping
 - disking

- scalping
- mulching
- environmental protection procedures relevant to forest site preparation operations
- types and uses of ground-engaging attachments
- effects of slope and terrain conditions on equipment setup, operation and stability
- machine specifications, restrictions and safe operating procedures, stability and operation in different terrain conditions and slopes, and methods to shut down the machine as outlined in workplace procedures or operator manual
- methods to conduct machine pre-operational checks and detect faults as outlined in workplace procedures or operator manual
- machine maintenance and servicing requirements as outlined in operator manuals
- reporting requirements regarding site, incident and hazard, personal reporting, check-in, production, and equipment maintenance
- features, components, capacity and uses of mechanised equipment used in forestry site preparation
- reasons and procedures for maintenance of mechanised equipment and ground-engaging attachments.
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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 a forestry environment or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - mechanised equipment and ground-engaging attachments used in forestry site preparation
 - forestry site for site preparation activities
 - PPE required in site preparation operations
 - vehicle-to-vehicle communication system
- specifications:
 - work order or instruction detailing forestry site preparation activities to be carried out by operator
 - workplace safety and environmental protection policies and procedures applicable to forestry site preparation activities operations
 - production plan
 - site emergency procedure
 - workplace safe operating procedures for mechanised equipment used in forestry site preparation
 - 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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