



Australian Government

FWPHAR3227 Operate forwarder

Release: 1

FWPHAR3227 Operate forwarder

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to operate a forwarder for log production and use optimised production processes in a commercial forest harvesting environment. The main job functions are to load logs at felling or pre-bunching sites, transport and unload logs at a mill or landing area. Activities are to be conducted safely and efficiently.

The unit applies to individuals who work as forwarder operators in small to large harvesting crews. Operators generally work under broad direction to complete routine activities related to forwarding operations and take responsibility for their work.

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

Pre-requisite Unit

Nil

Unit Sector

Harvesting (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. Plan and prepare to operate a forwarder	1.1 Review production plan, confirm its targets for felling and processing and assess wood flow requirements to ensure efficient machine operation and overall productivity 1.2 Confirm type, size and quantity of logs to be moved with forwarder to ensure that the load and the machine are in line with safe

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	working requirements and industry standards for operation 1.3 Confirm, identify and report health, safety, environmental and heritage risks of operation in line with standard operating procedures and site safety and environmental management plans 1.4 Apply risk control measures in line with standard operating procedures, site operational plan, legislative requirements and industry standards to eliminate or minimise risks 1.5 Identify emergency plan procedures to follow in the event of an emergency 1.6 Use production plan to identify entry points to the coupe, extraction routes and directions to the landing or other locations for efficient extraction of logs, minimum environmental impact and interference with other forestry operations 1.7 Assess terrain characteristics to establish machine stability 1.8 Carry out pre-operational checks on machine in line with workplace procedures or manufacturers' recommendations to ensure optimal production performance and operational effectiveness
2. Operate forwarder for loading	2.1 Use industry-accepted warning signs, vehicle-to-vehicle communication systems and procedures to maintain communication and workplace safety during operation 2.2 Drive and position forwarder for stability, safe access to logs and within reach of the crane and adjust the technique in response to terrain conditions 2.3 Use cabin controls to operate the crane to load the rear bunk by aligning and grappling logs to create a stable load 2.4 Systematically load logs into the bunk by using handling techniques to avoid log damage in line with the production plan requirements 2.5 Use techniques to maintain product separation in the bunk when multiple product grades are loaded or in line with the production plan requirements
3. Operate forwarder for transporting and unloading	3.1 Use techniques and appropriate equipment to restrain load in line with positioning and stability requirements for transportation 3.2 Line up the crane behind the forwarder and drive to the mill or landing site efficiently and safely to avoid damage to logs and equipment

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	3.3 Unload logs into safe and stable stacks at landing area or directly onto a truck 3.4 Recover all merchantable product from site in line with the production plan requirements
4. Segregate and stack logs	4.1 Visually assess logs for size, species and quality characteristics during loading at the felling site and unloading at the landing bay to ensure they are placed in the appropriate stack and in line with the production plan requirements 4.2 Mark and report logs that cannot be clearly and safely assessed in line with the production plan requirements 4.3 Position and construct log stacks to avoid log damage, provide stability, restrict height and facilitate safe access and conduct of other landing and equipment operations in line with planned worksite layout 4.4 Maintain stack separation and identification to ensure products are presented for an optimum transport and logistics cycle time and are in line with industry standards and production plan requirements 4.5 Clean area of all debris resulting from loading and unloading operations in line with resource management policies
5. Carry out machine operator maintenance	5.1 Park, shut-down, de-energise and isolate forwarder in line with workplace procedures or manufacturers' recommendations 5.2 Clean, check and carry out routine maintenance tasks on forwarder and equipment to maintain optimum operational performance 5.3 Identify and report machine and equipment faults, malfunctions or problems in line with workplace procedures or manufacturers' recommendations 5.4 Clean work area and dispose of or recycle waste materials in line with site environmental management plan 5.5 Record forwarder operations and maintenance activities

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	- read production plans, site safety and environmental management plans in a forest harvesting environment - read standard operating procedures and/or manufacturers' instructions for the operation of forest harvesting machinery
Writing	record operation, production and machine maintenance on paper based or electronic media
Oral Communication	- interact verbally and non-verbally using agreed systems and processes to communicate with others on site to ensure safe and effective forwarder operations - use appropriate vocabulary including technical language directly relevant to role
Numeracy	- interpret gauges relevant to safe operation of harvesting machinery - determine construction of stable log stack - estimate the weight of logs to determine loading requirements and compliance to load plate specifications
Navigate the world of work	understand main tasks, responsibilities and boundaries of own role
Interact with others	- use modes of communication suitable to purpose to confirm and clarify understanding - communicate and report operational and safety information to on-site personnel
Get the work done	- recognise and respond to routine problems - plan and organise own work activities and resources

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPHAR3227 Operate forwarder	FWPHAR3206 Conduct forwarder operations	Significant changes to reflect industry requirements for a safe, appropriate and efficient operation, including product quality. A new element and new PCs were added, most PCs were edited and PE and KE increased in content to	No equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
		map against the revised PCs. Additional foundation skills identified. Code and title change to reflect outcomes of unit and consistency with other machine operation units.	

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>