



Australian Government

FWPFGM3209 Construct and maintain forest roads and tracks

Release: 1

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Modification History

Release	Comment
1	Replaces equivalent FPIFGM3209B Construct and maintain forest roads and tracks, which was first released with FPI11 Forest and Forest Products Training Package Version 1. This is the first release of this unit in the new standards format.

Application

This unit of competency describes the outcomes required to plan, construct and maintain roads and tracks in a forest environment. It includes monitoring road or track conditions and coordinating maintenance work.

The unit applies to Bulldozer operator, Forestry technician, Harvesting technician, Mobile Equipment operator.

Licensing, legislative, regulatory, or certification requirements apply to this unit in some states & territories at the time of publication, and may differ according to jurisdiction.

Pre-requisite Unit

Nil

Unit Sector

Forest Growing and Management

Harvesting and Haulage

Elements and Performance Criteria

<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
1. Plan road or track	1.1 Obtain topographical map of area and assess details in relation to environmental management considerations. 1.2 Identify and confirm construction requirements with appropriate personnel. 1.3 Plan road or track including drainage and entry points that provide

	vehicle and equipment access, turning and loading space. 1.4 Prepare forest road or track construction plan that includes timelines, resources and equipment, in line with organisational practices
2. Construct road or track	2.1 Establish line of road and remove obstacles in line with plans. 2.2 Establish and maintain communication with others to ensure safe work. 2.3 Remove soil to establish base that has suitable width, slope and stability. 2.4 Construct water crossing points and drains in line with environmental requirements and site procedures. 2.5 Prepare and construct intersection points to provide suitable entry and exit levels and control water flow. 2.6 Place pipes or culverts and backfill and compact, in line with predicted water volume. 2.7 Transfer, spread and compact base and surface material to meet planned road or track design. 2.8 Control and manoeuvre equipment to compact road material and stabilise adjacent soil during construction. 2.9 Prepare road or track surface suitable for moving logs, and for the manoeuvre and traction of equipment.
3. Maintain road or track	3.1 Monitor condition of road or track to identify specific damage likely to lead to safety or environmental issues and report to appropriate personnel. 3.2 Redesign and remake areas of consistent damage with assistance from appropriate personnel. 3.3 Plan and carry out maintenance with minimal disruption to other work activities. 3.4 Record and report construction operations and maintenance in line with site procedures.

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Numeracy skills to:	calculate quantities of required material to construct and maintain tracks and roads.
Writing skills to:	prepare construction and maintenance plan and report on work

	activities.
Planning and organising skills to:	• prepare a plan, and the resources and materials for the construction and maintenance of a forest road or track.

Range of Conditions

Not Applicable

Unit Mapping Information

FPIFGM3209B Construct and maintain forest roads and tracks.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for FWPFGM3209 Construct and maintain forest roads and tracks

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Release	Comment
1	Replaces equivalent unit FPIFGM3209B Construct and maintain forest roads and tracks, which was first released with FPI11 Forest and Forest Products Training Package Version 1. This is the first release of this unit in the new standards format. Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement

Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- plan, construct and maintain a forest road or track in line with organisational tolerances
- operate one or more of the following road construction equipment effectively and safely
 - dozer
 - front end loader
 - skidder using bucket or blade attachments or grader using blade attachments
- identify and remove obstacles to construction
- establish water crossings and drains, using pipes, cords or culverts
- assess road or track for damage and report hazards or areas requiring redesign
- plan and carry out maintenance of forest roads and tracks
- report on road and track construction and maintenance.

Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- applicable regulations, standards, codes of practice and established safe practices for constructing and maintaining forest roads and tracks, including:

- data relating to road requirements and restrictions
- maximum road loads
- likely weather conditions
- expected timeframes
- survey locations and requirements
- water courses
- location of log landings
- road entry points
- crossing or entry points for other roads and tracks
- budget.
- environmental protection requirements and management considerations including:
 - roadside conditions and climate
 - habitat trees
 - ground growth
 - canopy
 - general forest lean
 - wind speed and direction
 - fallen trees
 - density of trees
 - ground slope
 - soil and water protection
 - ground hazards
 - obstacles
- operational procedures, checks and routine maintenance to be carried out on construction equipment
- road construction methods
- risks and hazards associated with forest road and track construction
- logging and harvesting operations
- road transport equipment requirements and capabilities in forest operations
- ground water behaviour
- workplace health and safety requirements, fire protocols and emergency evacuation procedures.

Assessment Conditions

The following resources must be made available:

- wheeled or tracked road construction equipment, including one or more of the following: dozer, front end loader, skidder or grader with bucket or blade attachments
- forest environment suitable to construct and maintain a track or road
- relevant personnel for the purposes of communicating information
- workplace requirements and site standards for constructing forest roads and tracks.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

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