



Australian Government

PUAFIR325 Operate heavy plant in fire control operations

Release: 1

PUAFIR325 Operate heavy plant in fire control operations

Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Application

This unit of competency involves the skills and knowledge required to operate heavy plant in fire control operations.

Heavy plant refers to heavy duty equipment and vehicles, specially designed for executing construction tasks, most frequently ones involving earthwork operations. This may include fire control line construction; clearing vehicle turnarounds, passing bays and safety zones; constructing helipads in forest and/or scrub environments and road construction.

The unit applies to personnel who operate heavy plant machinery, who will be directed to undertake a range of tasks to support fire operations and roadwork construction, it does not include tree pushing.

The fire sector is those sections of government departments, statutory authorities or organisations that have responsibility under jurisdictional arrangements for the delivery of firefighting and fire management services.

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

Pre-requisite Unit

Not applicable.

Competency Field

Fire

Unit Sector

Fire

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

1 Use and service heavy plant machinery

- 1.1** Heavy plant machinery is set up and pre-operational checks are undertaken to ensure safe operation in forest environments that are free of soil, water borne disease and weeds prior to and after use
- 1.2** Effective communication is established with supervisor, team members and support vehicle operators
- 1.3** Safe work procedures are employed when using heavy plant machinery for construction
- 1.4** Heavy plant machinery is parked safely and securely when not in operation
- 1.5** Personal protective clothing and equipment is worn and used, in accordance with organisational procedures

2 Construct fire control line

- 2.1** Obtain briefing and confirm work to be undertaken
- 2.2** Topographical and vegetation factors are considered when selecting a route for construction of a fire control line
- 2.3** Environmental, agricultural, cultural and heritage factors are considered when selecting a route for construction of fire control line using heavy plant machinery
- 2.4** Fire control line is constructed directly on fire edge or away from fire edge, taking into account weather conditions and/or changes in fire behaviour, to meet fire suppression requirements
- 2.5** Hazards are identified and considered when selecting route and constructing fire control line
- 2.6** Debris from fire control line construction is appropriately placed to facilitate fire suppression works and to reduce environmental impact
- 2.7** Fire control line is constructed to suit purposes, including vehicle access, in accordance with organisational procedures
- 2.8** Helipads, turning areas, passing bays and safety zones are constructed, as directed

3 Mop up and rehabilitate area

- 3.1** Mop up work is conducted, in accordance with organisational procedures and in coordination with crew

members

3.2 Rehabilitation work is conducted, in accordance with organisational procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

machines must include one or more of the following

- bulldozer
- excavator
- faller buncher
- front end loader
- grader
- harvester
- skidder

Unit Mapping Information

This unit replaces and is equivalent to PUAFIR321 Operate heavy plant in fire control operations.

Links

PUA Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>

Assessment Requirements for PUAFIR325 Operate heavy plant in fire control operations

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least one occasion and includes

- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements
- communicating through the chain of command
- communicating with personnel in support vehicles
- constructing a fire control line in forest or scrub environments
- constructing a fire control line adjacent to and at a distance from live fire edge
- identifying hazards and risks including exposures
- implementing industry and organisational standards when operating heavy plant machinery
- implementing safe work procedures
- mopping up and rehabilitating an area
- operating machines in a fire and non-fire environment
- participating in briefing sessions
- performing pre-start checks of heavy plant machinery
- performing basic maintenance and ensuring servicing of heavy plant machines in a fire or non-fire environment
- recognising and considering topographical, vegetation, agricultural, environmental, cultural and heritage factors
- selecting routes for fire control line construction
- working with different types of mop up activities

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions and includes knowledge of

- assessment of hazards and risks including characteristics of trees, topographical factors, vegetation, environmental factors, cultural and heritage factors and agricultural factors
- capabilities of support vehicles

- hazards and risks including exposures
- heavy plant machine capabilities, limitations, design and safety features
- industry and organisational standards for control line, helipad and roadwork construction and rehabilitation activities
- machine maintenance requirements in a fire ground environment
- organisational documentation, policies and procedures
- pre-start and post work check procedures
- safe work procedures including
 - assistance to vehicles and personnel working with machines
 - communication with fire control line supervisors and support vehicles
 - contact and communication with support vehicles
 - Falling Object Protection (FOPs) and Roll Over Protection (ROPs) are correctly fitted and used
 - fire ground emergencies
 - limits of machine capability
 - personal protective clothing and equipment
 - position in relation to live fire edge and fire intensity
 - safe work practices
 - seatbelts being worn in the cabin
 - survival techniques in burn over situations
- topographical, vegetation, environmental, cultural, heritage and agricultural factors
- types of mop up activities
- Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements including risk mitigation

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in industry approved simulated workplace operational situations that reflect workplace conditions.

Competency should be assessed in an organisation or agency approved operational environment or in a field based simulated environment.

Constructing a fire line should be assessed in a forest and/or scrub environment.

Resources for assessment must include access to

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, equipment, tools and personal protective clothing and equipment currently used in industry including
 - machinery and communications equipment
- applicable documentation including organisational procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

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