



**Australian Government**

# **PUAFIR402 Conduct simple prescribed burns**

**Release: 1**

# PUAFIR402 Conduct simple prescribed burns

## 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 prepare, conduct and evaluate simple prescribed burns in accordance with approved burn plans.

A prescribed burn is the controlled application of fire under specified environmental conditions to a predetermined area and at the time, intensity and rate of spread required to attain planned resource management objectives. A simple prescribed burn is characterised by low risk, low intensity, small area, low potential impact on assets, completion in one shift and minimal variation of fuel and terrain.

A prescribed burn plan is an approved plan for the conduct of prescribed burning, it includes a map identifying the area to be burned and incorporates the specifications and conditions under which the operation is to be conducted.

The unit is applicable to personnel responsible for preparing, conducting and evaluating a simple prescribed burn on public and private land.

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

It is essential that the prerequisite units listed below are obtained prior to the issuance of this unit to individuals within the fire sector or the units contributing to the attainment of a fire qualification.

PUAFIR303 Suppress wildfire

## Competency Field

Fire

## Unit Sector

Fire

## Elements and Performance Criteria

### ELEMENTS

### PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

#### 1 Prepare to burn

- 1.1 Burn operations for a simple prescribed burn are identified and undertaken, in accordance with approved prescribed burn plan, burn plan objectives, organisational procedures and legislative and regulatory requirements
- 1.2 Permits are obtained, in accordance with organisational procedures and legislative and regulatory requirements
- 1.3 Burn notifications and plans are issued to persons or organisations, in accordance with prescribed burn plan, organisational procedures and legislative requirements
- 1.4 Control lines, including secondary control lines, are specified and prepared, in accordance with organisational procedures
- 1.5 Prescribed burn plan operational hazards and risks to safety of people, property, assets, ecology and environment are identified and risk mitigation works are completed
- 1.6 Forecast weather conditions are monitored, recorded and assessed, in accordance with organisational procedures
- 1.7 Fuel conditions are monitored, in accordance with organisational procedures and prescribed burn plan
- 1.8 Resource requirements are confirmed with reference to burn plan

#### 2 Conduct burn

- 2.1 Prescribed burn notifications are issued, in accordance with organisational procedures
- 2.2 Pre-burn checks are conducted, in accordance with organisational procedures
- 2.3 Local weather conditions for day of burn are monitored and contingency arrangements actioned and communicated accordingly
- 2.4 Resources are gathered and personnel are briefed, in accordance with prescribed burn plan and contingency

arrangements

- 2.5** Burn ignition strategies, including lighting techniques patterns and sequences are implemented, in accordance with organisational procedures and prescribed burn plan
  - 2.6** Burning is monitored, patrol activities are conducted and operational changes made, as required
  - 2.7** Contingencies are implemented, in accordance with prescribed burn plan, as required
  - 2.8** Burn documentation is kept, in accordance with organisational procedures
  - 2.9** Burn operations are concluded and burn security is implemented, in accordance with organisational procedures
  - 2.10** Crews are debriefed and resources released from the burn
  - 2.11** Incidents are reported and investigated, in accordance with organisational procedures
- 3 Conduct post burn activities**
- 3.1** Outcomes of the burn are assessed against burn objectives, in accordance with organisational procedures
  - 3.2** Variations from the burn plan are reported, in accordance with organisational procedures
  - 3.3** Restoration and rehabilitation works are identified and carried out, in accordance with organisational procedures
  - 3.4** Prescribed burn records are submitted, in accordance with the 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.

prescribed burn plan must include

- approval of plan for the conduct of prescribed burning
- map identifying area to be burned
- specifications and conditions under which operation is to be conducted

burn objectives must include one or more of the following

- asset protection
- biodiversity protection
- community protection
- habitat management
- hazard reduction
- management of cultural sites and activities
- protection of fire sensitive ecological communities
- vegetation management

personnel or organisation must include one or more of the following

- personnel or organisations who
  - have an interest in adjacent land to which a burn could spread
  - have an interest in managing the consequences of a burn
  - have an interest in specific assets
  - have an interest in the area to be burned
  - may be concerned by evidence of a burn

resources must include one or more of the following

- contingency resources
- crews for control, suppression and ground ignition
- equipment and supplies
- logistical support
- other vehicles
- tankers

burn ignition strategies and tactics must include

- contingency arrangements
- fire behaviour to be achieved
- ignition methods, lighting patterns, sequencing and timing of ignition

lighting techniques must include one or more of the following

- hand held
- vehicle mounted propelled incendiaries
- wind and waterproof matches

lighting techniques and patterns must include

- contour lighting
- echelon
- grid
- line

lighting sequence must include one or more of the following	<ul style="list-style-type: none"><li>• multi-line</li><li>• spot</li><li>• lighting sequences that considers<ul style="list-style-type: none"><li>• fuel arrangement</li><li>• fuel moisture</li><li>• slope</li><li>• time of day</li><li>• wind direction</li></ul></li></ul>
monitoring burn must include one or more of the following	<ul style="list-style-type: none"><li>• fire shape and spread</li><li>• flame height</li><li>• fuel moisture content</li><li>• predictions</li><li>• rate of spread</li><li>• recording</li><li>• safety considerations</li><li>• smoke development</li><li>• weather observation</li><li>• wind speed and direction</li></ul>
concluding operations and burn security must include one or more of the following	<ul style="list-style-type: none"><li>• mitigating hazards for public safety</li><li>• mopping up and black out</li><li>• patrolling burn area</li><li>• reopening roads</li><li>• transfer of responsibility, as per organisational procedures</li></ul>
outcomes of the burn must include one or more of the following	<ul style="list-style-type: none"><li>• achievement of burn objectives</li><li>• escapes</li><li>• external impacts</li><li>• levels of scorch</li><li>• percentage of area burnt</li><li>• reporting and storage of burn documentation</li></ul>

## Unit Mapping Information

This unit replaces and is equivalent to PUAFIR412 Conduct simple prescribed burns.

## Links

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