



Australian Government

PUAFIR406 Develop simple prescribed burn plans

Release: 1

PUAFIR406 Develop simple prescribed burn plans

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 develop simple prescribed burn plans for specified burn areas and to prepare the plans to achieve identified objectives.

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 the development of simple prescribed burn plans.

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

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Identify burn areas and burn objectives

- 1.1 Areas requiring simple prescribed burning are identified, in accordance with organisational procedures
- 1.2 Burn objectives are identified, in accordance with organisational procedures
- 1.3 Target groups are identified and consultation process is undertaken, in accordance with organisational procedures
- 1.4 Legislative and regulatory requirements are identified and complied with throughout planning process

2 Prepare prescribed burn plan for simple burn

- 2.1 Key features of the burn area are identified including variations in terrain, fuel types and quantities control lines and weather
- 2.2 Risks from proposed burn, both on and off site, are assessed and considered in planning process including operational hazards, safety of people, protection of property, assets, environment and ecological risks
- 2.3 Results of consultation are factored into the planning process, in accordance with organisational procedures
- 2.4 Fire behaviour to meet burn objectives and to account for variations in fuel, terrain and weather is determined
- 2.5 Burn ignition strategies and tactics required for fire behaviour, intensity and that are suitable for location are determined, in accordance with organisational procedures
- 2.6 Lighting techniques and lighting patterns are identified
- 2.7 Hazard and risk mitigation are determined and asset protection works are identified
- 2.8 Strategies for mitigating hazards and risks are identified and required preparatory works are identified
- 2.9 Strategies and tactics for controlling prescribed burn are identified

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| | 2.10 | Type and quantity of resources required are identified |
| | 2.11 | Prescriptions for implementation of burn plan strategies and tactics are documented, in accordance with organisational procedures |
| | 2.12 | Contingencies are outlined in the prescribed burn plan |
| | 2.13 | Prescribed burn plan is prepared, in accordance with organisational procedures |
| 3 Gain approval of prescribed burn plan | 3.1 | Prescribed burn plan is submitted for approval, in accordance with organisational procedures and legislative requirements |
| | 3.2 | Modifications and amendments to prescribed burn plan are made based on feedback received |
| | 3.3 | Prescribed burn plan approval is gained |

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.

simple prescribed burn plan must include

- an approved plan for conduct of simple prescribed burn
- map identifying area to be burned
- specifications and conditions under which operation is to be conducted

simple prescribed 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
- management of cultural sites and activities
- protection of fire sensitive ecological communities

target consultation groups must include one or more of the following	• vegetation management • adjacent land owners or managers • commercial operations within impact zone • community groups with specific interests • government organisations including local, state and federal • groups or individuals that may be adversely affected • other groups and people within prescribing organisation
lighting techniques must include	• hand held • wind and/or waterproof matches
lighting patterns include one or more of the following	• contour lighting • echelon • grid • line • multi-line • spot
operational hazards must include two or more of the following	• adverse terrain or weather conditions • crew size • falling trees and limbs • hazardous material • high fuel loads • ignition methods • plant • powerlines • road traffic • vegetation type
safety of people must include two or more of the following	• impact of smoke on vulnerable communities near burn area • safety of any people permanently or temporarily in burn area • safety of people involved with burn implementation • safety of people on areas adjacent to burn area
property and assets must include two or more of the following that are near the burn area	• camps or recreational areas • commercial land use such as crops or industry • cultural sites or historical buildings • other property and assets • plantations

environmental and ecological risks must include

- research plots and reference areas
- stock
- urban areas
- utilities - power and telephone lines, water supply structures and communications towers
- impact on
 - native flora and fauna including rare and endangered species
 - smoke
 - soil
 - use of chemical fire suppressants
 - water quality or supply

resources must include one or more of the following

- crews for ground ignition and suppression
- equipment backup
- ignition and suppression equipment and supplies
- logistical support
- other vehicles
- tankers

Unit Mapping Information

This unit replaces and is equivalent to PUAFIR413 Develop simple prescribed burn plans.

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 PUAFIR406 Develop simple prescribed burn plans

Modification History

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

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 legislative, regulatory, organisational and permit requirements
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements including risk mitigation and safe work practices
- assessing fuel types and quantities in burn area
- determining actions to minimise impacts of simple prescribed burn
- developing contingency arrangements
- developing pre-burn work schedule
- gaining simple prescribed burn approval
- identifying and working with resources
- identifying burn areas including developing timelines for planning and conduct of simple prescribed burn, simple prescribed burn objectives, strategies and tactics to meet simple prescribed burn objectives, ignition strategies and lighting techniques and patterns for ignition
- identifying resources
- identifying, assessing and mitigating operational hazards and risks
- identifying, assessing and mitigating risks to people, property and assets, ecological and environmental risks
- implementing legislation and regulations
- interpreting map of area and identifying key features
- predicting anticipated fire behaviour and intensity in burn area
- preparing plans and map for simple prescribed burning
- targeting consultation groups are identified, liaised with and consulted

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

- accumulated fuels

- characteristics of simple prescribed burns including completed in one shift, involves minimal variation of fuels and terrain, low intensity, low potential impact on assets, low risk and small area
- contingencies
- effects of fire on vegetation, fauna, people, property, assets, ecology and the environment
- fire behaviour for fuel type being prescribed
- fire prediction tools
- ignition strategies and tactics
- legislative, regulatory, organisational and permit requirements for simple prescribed fires
 - notification requirements
 - organisational documentation, policies and procedures
 - planned burn hazards and risks
 - resource requirements and capabilities
- simple prescribed burn plans
- simple prescribed burning ignition and suppression strategies
- smoke management
- target groups and community
- traffic management plan requirements
- Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements including risk mitigation and safe work practices

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 demonstrated in a range of actual and/or field based workplace environments.

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
 - area requiring application of fire under prescribed conditions
 - existing management plans and data relevant to area being prescribed

- applicable documentation including organisational procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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