



Australian Government

PUAFIR302 Suppress urban fire

Release: 2

PUAFIR302 Suppress urban fire

Modification History

Release 2. Updated superseded HLT Pre-requisite unit.

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

Application

This unit involves the skills and knowledge required to work as a member of a team under limited supervision when suppressing an urban fire. It includes responding to fires and determining extinguishing media, equipment and structural fire behaviour. It also includes protecting people; how to attack fires, ventilate structures, observe and react to fire conditions; undertake ancillary firefighting operations and complete operations.

The unit applies to personnel required to suppress a range of different types of structure and non-structure fires where there is the potential for multiple hazards to be present.

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.

HLTAID011 Provide First Aid

PUAFIR203 Respond to urban fire

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 Initiate response to fire	1.1	Fire details are received and initial response is determined, in accordance with organisational procedures
	1.2	Firefighting personal protective clothing and equipment requirements are determined and used, based on available information
	1.3	Changes to fire conditions are reported and acted on to determine firefighting tactics
	1.4	Firefighting considerations are taken into account when determining tactics
2 Determine extinguishing media and equipment	2.1	Available static or reticulated water supplies to support firefighting operations are identified and capacity is determined
	2.2	Selection of hose and equipment is sufficient to support firefighting operations
	2.3	Extinguishing media are selected, in accordance with the type of fire within the area of operation
	2.4	Breathing apparatus is used within its' safe work limitations, in accordance with manufacturers' specifications and organisational procedures
3 Determine structural fire behaviour	3.1	Combustion processes taking place in the structure are determined
	3.2	Tactics for terminating combustion processes are determined
	3.3	Presence of hazardous materials located in the fire area are identified and an appropriate plan of action is determined
4 Protect people	4.1	Primary and secondary searches are planned, conducted and supported, in accordance with organisational procedures
	4.2	Appropriate priority and support is allocated to fire

rescue and evacuation activities

- 4.3 Casualties are treated and/or handed into the care of medical personnel once clear of threat of fire

5 Attack fire

- 5.1 Firefighting strategies and tactics are prioritised, implemented and monitored, in accordance with organisational procedures
- 5.2 Firefighting extinguishing media are selected, in accordance with the type of fire and the actual or potential hazards identified within the area of operations
- 5.3 Fire is located and access is gained in the safest and most effective manner to minimise damage to property or the risk of injury to others or self, in accordance with organisational procedures
- 5.4 Potential fire behaviour is anticipated and action is taken to protect the safety of self and others and to achieve determined strategies
- 5.5 Breathing apparatus procedures are complied with, in accordance with organisational requirements
- 5.6 Fire is attacked using a range of extinguishing media and application techniques appropriate to type and size of fire, in accordance with manufacturers' specifications and organisational procedures
- 5.7 Evidence of fire cause is protected and action is taken, in accordance with organisational procedures
- 5.8 Firefighting suppression activities, including extinguishing media, are used to contain spread of fire and damage to the environment and property
- 5.9 Burning and smouldering materials are identified and extinguished, in accordance with organisational requirements
- 5.10 Communication is maintained and monitored throughout firefighting operations, in accordance with organisational procedures
- 5.11 Firefighting ancillary activities are undertaken to avoid or minimise risk of environmental damage

6 Ventilate structure

- 6.1 Structures are ventilated, as required, using the most appropriate natural and mechanical ventilation

		techniques, in accordance with organisational procedures
	6.2	Structures are ventilated without endangering personnel or increasing the spread of fire, in accordance with organisational procedures
7 Observe and react to fire conditions	7.1	Fire is continually monitored and significant changes affecting the status of the fire and effectiveness of selected firefighting strategies are reported, in accordance with organisational procedures
	7.2	Firefighting strategies and tactics are modified and adjusted, in accordance with organisational procedures, the changing conditions at the fire or as directed
8 Undertake ancillary firefighting operations	8.1	Firefighting and ancillary activities undertaken at the incident ensure that the risk of injury to the public, other personnel and self is avoid or minimised
	8.2	Salvage and overhaul activities are undertaken to support the conclusion of firefighting operations, in accordance with organisational procedures
9 Complete operations	9.1	Equipment is made ready for operational use, in accordance with organisational procedures
	9.2	Damaged or missing equipment is replaced, recorded and/or reported, in accordance with organisational procedures
	9.3	Participate in debriefing sessions

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.

fire must include

- fires involving electricity
- industrial complex
- mobile property fires

	• multi-storey structures • structure and non-structure fires which may also include • fires involving fuels and chemicals • ship fires
personal protective clothing and equipment must include	• breathing apparatus • distress alarms • structural fire protective clothing
reporting of changes to fire condition must include	• initial reports at scene • reports of achievement during firefighting e.g. completion of rescue and fire under control etc. • reports of significant changes in conditions • Situation Reports (SITREPS)
equipment must include	• branches/nozzles • breathing apparatus and control equipment • fire extinguishers • forcible entry tools • hand tools • hoses and hose fittings • ladders and rope lines • portable lighting • radios • salvage gear • small gear and ancillary equipment • stand pipes, hydrants and booster connections • ventilation equipment
extinguishing media must include	• extinguishing powders • foams • gaseous extinguishing agents • water
firefighting strategies must include	• confining the spread of fire • extinguishment • protecting exposures • protection of area of fire origin and evidence of cause • rescuing occupants • salvage and overhaul
access must include	• forcible entry • normal entry • roof access from ladders and/or aerial

application techniques must include	- appliance - defensive mode - direct attack - direction of attack - indirect attack - offensive mode
ancillary activities must include three or more of the following	- damming and/or draining water runoff - guarding against hazards - making up equipment - overhaul - protecting the ignition site - salvage - securing the area - supply of materials
structures to be ventilated must include	- commercial - high rise buildings - mobile structures i.e. road, rail, aviation and marine vehicles - multi-storey - residential

Unit Mapping Information

This unit replaces and is equivalent to PUAFIR302B Suppress urban fire.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>

Assessment Requirements for PUAFIR302 Suppress urban fire

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) organisational requirements
- attacking fires
- completing operations
- controlling fire environment by cooling fire gases
- determining extinguishing media and equipment
- firefighting tactics including cooling the fuels, interrupting the chemical chain reaction, removing fuels, excluding oxygen and ventilation
- firefighting suppression activities including locating and accessing the fire, search and rescue, anticipation of fire behaviour, ensuring safety, applying extinguishing media, applying techniques to maximise the effect and minimise the damage and identifying and protecting area of fire origin and evidence of cause
- initiating response to fire
- observing and reacting to fire conditions whilst maintaining situational awareness
- operating breathing apparatus
- operating firefighting equipment
- participating as a firefighting team member
- performing ancillary firefighting operations
- protecting people
- recognising fire behaviour indicators
- undertaking salvage and overhaul
- using natural and mechanical ventilation techniques
- utilising firefighting strategies and tactics for rescue, exposures, confinement, extinguishment, overhaul, ventilation and salvage
- working with a range of extinguishing media

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

- combustion processes including spontaneous heating combustion and ignition
- damage to the environment from fire suppression activities including air pollution, hazards to flora and fauna, soil and water pollution
- structural fire behaviour and factors which impact on spread
- fire behaviour indicators
- firefighting tactics including cooling fuels, interrupting chemical chain reaction, removing fuels, excluding oxygen and ventilation
- firefighting considerations including available firefighting resources, extinguishing media, fire exposures, signs of structural collapse, size of fire, topography, type of fire and weather
- hazardous materials including those defined by the Australian Dangerous Goods Code and other fire extinguishing substances
- organisational documentation, policies and procedures including reporting and recording incident details and breathing apparatus control procedures
- personal protective clothing and equipment requirements including breathing apparatus
- purpose of ventilation techniques including assisting in fire suppression activities, facilitating evacuation of occupants, maximising visibility within a structure, minimising damage, preventing build up of toxic or explosive atmospheres and providing clean air
- strategies and methods of attack for extinguishing fires in a range of structures
- types of media for firefighting and their suitability for different classes of fire
- use of firefighting equipment and application of techniques
- ventilation techniques including horizontal, hydraulic, mechanical, natural and vertical
- 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 on the job or in a simulated 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
 - firefighting equipment, breathing apparatus, control equipment and extinguishing media
 - firefighting, ventilation and salvage equipment
 - range of controlled or simulated fires
- applicable documentation including organisational procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

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