



Australian Government

PUASAR030 Undertake trench rescue

Release: 1

PUASAR030 Undertake trench rescue

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 undertake trench rescues as member of a single organisation or multi-disciplinary team. It includes a range of trench rescue situations.

The unit is applicable to personnel from the emergency services, volunteer organisations and/or organisations working in environments where the potential for trench collapse is prevalent.

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

Pre-requisite Unit

PUASAR022 Participate in a rescue operation

Competency Field

Search and Rescue

Unit Sector

Not applicable

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare for trench rescue operation

PERFORMANCE CRITERIA

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

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| 1.1 | Operation and task information is obtained through a briefing, in accordance with organisational procedures |
| 1.2 | Shoring, propping up and excavating equipment is identified and prepared for use, in accordance with organisational procedures |

- 1.3 Personal protective clothing and equipment and trench rescue equipment is selected, in accordance with organisational procedures
 - 1.4 Any further details on the nature of the rescue are received and analysed en route
 - 1.5 Potential hazards and associated risks are discussed with rescue team members while on route
- 2 Assess and manage trench rescue scene**
 - 2.1 Physical features of the trench rescue are assessed before deploying rescue resources and team members
 - 2.2 Hazards and environmental conditions are identified, monitored and controlled using risk mitigation processes
 - 2.3 Trench rescue scene is managed to control access and to maintain a safe operational environment
 - 2.4 Scene management procedures are followed, in accordance with organisational procedures
 - 2.5 Communication with other personnel on site is established and maintained throughout the rescue operation
- 3 Stabilise trench**
 - 3.1 Trench collapse pattern and signs of further collapse are identified
 - 3.2 Action to minimise further trench collapse is undertaken, in accordance with organisational procedures
- 4 Locate and enter collapsed trench**
 - 4.1 Assessment of incident scene is undertaken to determine possible location of casualties
 - 4.2 Appropriate resources are used to assist in location of casualties
 - 4.3 Condition of casualties and nature of entrapment is ascertained, where possible, in accordance with organisational procedures
 - 4.4 Appropriate excavation techniques are employed to gain access to casualties
 - 4.5 Located casualties are treated, in accordance with organisational procedures and in consultation with medical personnel

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|-------------------------------------|------------|--|
| | 4.6 | Hygiene precautions are followed, in accordance with organisational procedures |
| 5 Remove casualties | 5.1 | Casualties are released, treated and stabilised, in accordance with organisational procedures |
| | 5.2 | Released casualties are removed from scene using recognised techniques |
| | 5.3 | Appropriate actions are taken to preserve the incident scene, in accordance with organisational procedures |
| 6 Conclude rescue operations | 6.1 | Equipment is recovered, cleaned and serviced, in accordance with organisational procedures and manufacturers' guidelines |
| | 6.2 | Hygiene precautions are implemented, in accordance with organisational procedures |
| | 6.3 | Decontamination procedures are followed, in accordance with organisational procedures |
| | 6.4 | Operational debriefing is participated in, in accordance organisational procedures |
| | 6.5 | Operational documentation including post incident report is completed, 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.

Unit Mapping Information

This unit replaces and is equivalent to PUASAR030A Undertake trench rescue.

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 PUASAR030 Undertake trench rescue

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 and performance criteria on at least one occasion and includes

- applying excavation techniques
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements including identifying, controlling and treating situational and environmental hazards
- assessing and managing a trench rescue scene
- communicating with personnel and casualties
- completing organisational documentation
- concluding rescue operations
- constructing and installing shoring, shielding and edge management systems
- extricating casualties' safely whilst minimising further injury to casualty, self and others
- following organisational policies and procedures
- identifying and operating trench rescue equipment including lifting systems, lowering and hauling systems and ventilation equipment
- implementing hygiene precautions
- locating and entering a collapsed trench
- participating in and contributing to briefings and debriefings
- preparing for a trench rescue operation including collecting operational and task information and rescue resources
- preserving scene evidence
- recognising further signs of trench collapse
- recovering, cleaning and maintaining rescue equipment
- removing casualties using approved techniques
- stabilising the trench
- undertaking and monitoring rescue scene management
- undertaking temporary and permanent shoring
- using personal protective clothing and equipment

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the

requirements of the elements and performance criteria and includes knowledge of

- casualty location and removal techniques including edge management, shielding and excavating and temporary and permanent shoring
- characteristics and limitations of trench rescue equipment
- communication methods and techniques
- environmental and situational hazards including exposure to toxic, biological or other substance, falls from heights or into depths, further trench collapse, hazardous atmospheres, heat exhaustion or hypothermia, moving machinery either electrical or mechanical, tides, vibrations from external sources, water and weather
- excavation, shoring, shielding and edge management techniques
- field notes, incident reports, notebook and logbook requirements
- hygiene precautions
- organisational documentation, policies and procedures
- personal protective clothing and equipment
- preservation of scene evidence
- processes and procedures for briefings and debriefings
- recognised removal techniques including edge management, shielding and excavating, shoring and temporary and permanent shoring
- rescue scene management processes including establishing and monitoring safety zones, establishing barriers and perimeter access controls, liaising with medical services, managing bystanders and preserving evidence
- soil stability
- trench collapse system
- trench definition as specified in state or territory legislation, or regulations
- trench rescue equipment and excavation techniques
- trench rescue equipment including atmospheric monitoring, edge management systems, equipment, excavating equipment, hand tools, ladders, pumps, ropes, shielding, shoring and ventilation equipment
- Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) 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 must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in organisationally approved simulated workplace operational situations that replicate workplace conditions.

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.

Resources for assessment must include access to

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

Links

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