

# PUASES008A Undertake storm and water damage operations

**Revision Number: 2** 



#### PUASES008A Undertake storm and water damage operations

## **Modification History**

Release	TP version	Comments
2	PUA12 V1	Layout adjusted.
1	PUA00 V8.1	First release in TGA.

## **Unit Descriptor**

This unit covers the competency required to undertake storm and water damage operations as a member of a response team.

This unit replaces PUASES001B Undertake storm and water damage operations.

## **Application of the Unit**

This unit applies to persons responding as a member of a team to storm and/or water damage operations in rural and urban environments which can range in intensity and impact from localised thunderstorm or windstorm events to tropical cyclones.

Similar damage characteristics can also result from other causes, such as vehicles crashing into properties.

Storm damage operations can involve damage to trees and structures.

Flooding, whether caused by slow river rise, storm waters, storm surge or flash flooding, has similar impact in terms of water damage. Techniques for minimising the effects of water entry are common to storm, flood and other water damage events.

Evacuation and rescue by boat are not dealt with as part of this unit.

## **Licensing/Regulatory Information**

Not applicable.

## **Pre-Requisites**

Not applicable.

Approved Page 2 of 13

## **Employability Skills Information**

This unit contains employability skills.

### **Elements and Performance Criteria Pre-Content**

Elements describe the essential outcomes of a Unit of Competency.

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where *bold italicised* text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Approved Page 3 of 13

#### **Elements and Performance Criteria**

#### **ELEMENT**

#### PERFORMANCE CRITERIA

- 1. Prepare for storm and water operations
- 1.1 *Operation and task information* is obtained through *situational awareness* and command structure at an incident site
- 1.2 *Hazard* identification, risk assessment and control measures are undertaken as required by organisational policies and procedures
- 1.3 *Equipment* is selected based on incident information and is checked to ensure it is ready for operational use
- 1.4 Personal protective equipment is selected and worn
- 1.5 *Work area isolation methods* are applied to ensure safety in accordance with organisational policies and procedures
- 1.6 Support for safe and timely *evacuation* is provided, as required
- 2.1 Liaison with *stakeholders* is undertaken to provide *information* which increases awareness of situation, safety and facilitate operational requirements
- 2.2 Information is provided to team leader, as required
- 3. Undertake storm and water operations

2. Provide information

which assists with

operations

- 3.1 Own safety is ensured when undertaking and completing operational tasks by *working safely* in conjunction with others
- 3.2 Debris is removed, cleared and/or controlled to minimise risk of injury and further damage, and safe access to and from incident site is provided
- 3.3 *Techniques for temporary repairs* and/or improvised support are applied in accordance with organisational standard operating procedures to buildings or structures to make safe, minimise further damage and maximise safety
- 3.4 *Sandbagging* techniques are used to minimise further damage
- 3.5 *Water diversions* are created to mitigate the effects of damage, as required
- 3.6 **Rescue operation of team member**/s is performed in accordance with organisational policies and procedures
- 3.7 Support is provided to personnel undertaking roof repairs and/or working at height through the set up, placement and access to appropriate tools and equipment
- 3.8 Trees causing a hazard to life or property are secured, removed and/or reported according to

Approved Page 4 of 13

#### **ELEMENT**

#### PERFORMANCE CRITERIA

organisational policies and procedures

- 4. Complete operations
- 4.1 Equipment is recovered, cleaned and serviced according to organisational standards and manufacturer's guidelines
- 4.2 Equipment failure and/or deficiency is reported according to organisational procedures
- 4.3 Signs and symptoms of operational stress in self and others are recognised and reported
- 4.4 Information required for *operational documentation* and equipment logs is contributed to
- 4.5 Debrief is participated in as required by organisational policies and procedures

Approved Page 5 of 13

## Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

#### **Required Skills**

- communicate with stakeholders, specifically in relation to situational awareness, safety and operational requirements
- construct sandbag barriers
- · construct temporary repairs
- identify and use tools, generators, ladders, lighting
- remove debris safely
- return equipment to operational readiness after use
- take precautions against electrical hazards
- use initiative to operate effectively under direction
- wear appropriate personal protective equipment correctly
- work safely
- work with others in a team

#### Required Knowledge

- anchors (constructed or improvised)
- hazard identification and risk control techniques
- height operations
- legal issues surrounding entry into property or workplace
- legislation relevant to storm and water operations
- relevant emergency public information and warning strategies
- relevant occupational health and safety principles and practices
- relevant organisational policies and procedures (such as relevant legislation; operational, corporate and strategic plans; operational performance standards; operational policies and procedures; organisational personnel and occupational health and safety practices and guidelines; organisational quality standards; organisation's approach to environmental management and sustainability)
- resources to assist with communicating with members of the community
- roof safety systems
- storm and water damage mitigation techniques
- structural safety considerations
- support agencies
- types of pumps and power tools

Approved Page 6 of 13

#### **Evidence Guide**

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit Assessment must confirm the ability to:

- perform effective temporary structural weather proofing techniques to minimise further damage and to make safe
- use mitigation techniques to minimise and/or restrict water damage
- support roof/height operations to complete operations effectively.

#### **Consistency in performance**

Competency should be demonstrated during exercises and/or incidences reflecting environmental variance in a simulated emergency environment or on-the-job.

# Context of and specific resources for assessment

#### Context of assessment

Competency should be assessed completing storm damage and flood mitigation operations, exercises or scenarios as a member of a team acting under direction and general supervision.

#### Specific resources for assessment

Access is required to:

- incident, exercise or simulation, or series of tasks
- equipment used in storm and water damage operations
- response team.

#### Method of assessment

In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook.

Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment.

Assessment may occur in an operational environment or in an industry-approved simulated work environment. Forms of assessment that are typically used include:

- direct observation
- interviewing the candidate
- journals and workplace documentation
- third party reports from supervisors

Approved Page 7 of 13

• written or oral questions.

Approved Page 8 of 13

## **Range Statement**

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. *Bold italicised* wording in the Performance Criteria is detailed below.

# Operation and task information may include:

- access and egress routes
- command, control and coordination arrangements
- extent and nature of damage
- location, magnitude and type of event
- potential hazards
- weather forecast

## Situational awareness may include:

- systematic information seeking process where operational task information is gathered, monitored and reassessed and includes:
  - damage found
  - · evacuation of immediate area
  - · evacuation plan
  - hazard assessment
  - · hazardous trees
  - height
  - identification of underlying hazards
  - scene assessment
  - size up
  - walk around/inspection of site
  - water levels

#### Hazards may include:

- adverse weather (particularly high winds and rain)
- animals and insects
- contaminants/chemical/biological
- damaged structures
- debris
- equipment
- fatigue and/or operational stress
- · hazardous materials
- mud
- night/low light operations
- people
- terrain
- threatening trees
- time pressure
- traffic
- weather hot/cold, wet/wind
- utilities including electricity, gas, water and

Approved Page 9 of 13

sewerage

Approved Page 10 of 13

#### **Equipment** may include:

- anchors
- chainsaws/polesaws
- generators
- hand tools (crowbars, hammers, handsaws, knives, loppers, nails, pliers, screwdrivers, screws, snips)
- ladders
- lighting
- personal protective equipment
- petrol and electric
- power tools (including drills, reciprocating saw, nail guns, circular saws, tech drivers)
- props (acrow props) and shoring materials
- roof safety kit
- ropes
- sandbags and sand bagging machines
- submersible and non-submersible pumps
- timber batten
- timber sheeting
- water proofing materials plus their fixings (tarpaulins, plastic sheeting)
- water proofing tapes and sealant materials

## Work area isolation methods

may include:

- placement of barrier
- placement of safety cones, demarcation tapes and flashing beacons

#### **Evacuation** may include:

using readily available transport

#### Stakeholders may include:

- crew members
- home owner/s
- members of household
- other agencies
- team leader

#### *Information* may include:

- self-help provided to householders either directly or over the telephone
- warnings provided face-to-face or over the telephone to householders, by public address systems, such as loud-hailers as defined by operations managers and delivered under direction

#### Working safely may include:

- Avoiding exposure to contaminated water and mud where possible
- Identifying possible structural safety issues
- Manual handing
- Monitoring and re-assessing
- Personal protective equipment

Approved Page 11 of 13

- Prompt treatment and reporting of injuries
- Public control
- Risk assessment
- Universal precautions against infection

#### Techniques for temporary repairs may include:

- coverings
- external and internal weatherproofing
- replacement
- ropes
- sealing
- stapling
- shoring
- tape
- tarping
- tie off/securing

#### Sandbagging may include:

- constructing walls
- constructing water diversion
- filling by hand
- filling by machine
- stacking
- using as weights/holding down

#### Water diversions may include:

- earth walls
- fabricated barriers
- laying of sandbags
- pumping
- salvaged material
- synthetic materials
- tarps/plastic
- trenching

#### Rescue operation of team *member/s* may include:

- casualty handling
- casualty packaging
- extrication
- rescue of a team member from height

## Set up, placement and access to appropriate tools and equipment may include:

- ladders (care and use), climbing techniques, types of ladders, placement/set up, safety, stabilisation, alternatives
- lighting placement such as set up, use of generators, placement, types of lighting (torches, portable lighting, headlamps)

#### Operational documentation may include:

- incident report
- injury reporting
- log books
- notice to occupant

Page 12 of 13

Government Skills Australia

#### risk assessment

## **Unit Sector(s)**

Not applicable.

Approved Page 13 of 13