



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FPICOT3252A Use environmental care procedures to undertake fire salvage operations**

Release: 2

## **FPICOT3252A Use environmental care procedures to undertake fire salvage operations**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit descriptor**

This unit describes the outcomes required to undertake tree salvaging following forest fires, in line with a salvage plan that incorporates effective environmental procedures and sustainability principles

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

### **Application of the Unit**

#### **Application of the unit**

The unit involves undertaking environmentally effective and sustainable tree salvaging operations in a fire salvage environment

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

### **Pre-Requisites**

Not Applicable

## **Employability Skills Information**

**Employability skills**      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 performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify environmental care requirements	<p>1.1.Applicable Occupational Health and Safety (OHS), environmental, legislative and organisational requirements relevant to following environmental care practices in completing fire salvage operations are identified and followed</p> <p>1.2.Work order is reviewed and environmental care requirements are identified and clarified with appropriate personnel</p> <p>1.3.Existing and potential environmental risks and hazards are identified and reported to relevant personnel</p>
2. Prepare for fire salvage operations	<p>2.1.Schedule for salvaging is reviewed and confirmed with appropriate personnel</p> <p>2.2.Operational activities are identified</p> <p>2.3.Preliminary site work is confirmed</p> <p>2.4.Tree location and stability are assessed for conditions likely to effect safety and merchandising priorities</p> <p>2.5.Equipment is selected appropriate to work and environmental care requirements in line with workplace procedures</p> <p>2.6.Equipment is checked for effectiveness in line with manufacturer's specifications</p> <p>2.7.Planning permits and access permission are confirmed</p> <p>2.8.Communication with others is established and maintained in line with OHS requirements</p>
3. Perform fire salvage operations in line with environmental care requirements	<p>3.1.Movement and whereabouts of personnel are monitored</p> <p>3.2.Pre-harvesting environmental care requirements are undertaken</p> <p>3.3.Designated trees are salvaged in line with salvage plan</p> <p>3.4.Heads and non-merchantable stems are dispersed or otherwise handled in line with work order</p> <p>3.5.Logs are hauled to log landings and landscape left in safe condition suitable for regeneration</p>
4. Complete documentation	<p>4.1.Product volumes are tallied and recorded in departing salvage site</p> <p>4.2.Variations are reported in line with workplace procedures</p> <p>4.3.Environmental care procedures are recorded and reported in line with workplace procedures</p> <p>4.4.Breaches or potential breaches of relevant environmental regulations are reported in line with workplace procedures</p>

## **Required Skills and Knowledge**

### **REQUIRED SKILLS AND KNOWLEDGE**

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

#### **Required skills**

- Technical skills sufficient to use harvesting plant and equipment; undertake advanced chainsaw harvesting techniques; undertake advanced 4WD operations
- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others
- Literacy skills sufficient to accurately record and report workplace information, and maintain documentation; use standard VHF&UHF radios, GPS systems; read topographic maps; effectively assess salvage operation requirements including fire damage
- Problem solving skills sufficient to identify problems and faults in plant and equipment; demonstrate appropriate response procedures

#### **Required knowledge**

- Applicable Commonwealth, State or Territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for using environmental care procedures to undertake fire salvage operations
- Environmental protection requirements, including the safe disposal of waste material, the cleaning of plant, tools and equipment, returning the environment to its original or near to original condition on completion of activity and minimising noise
- Organisational and site standards, requirements, policies and procedures for using environmental care procedures to undertake fire salvage operations
- Environmental risks and hazards
- Minimising environmental impact
- Using material effectively and efficiently
- Principles of ecological sustainability as they pertain to the specific forest type, landscape and fire regime to which the coupe or forest is exposed
- Characteristics of trees and timber defects
- Assessment of fire damaged trees
- Fire salvage operations and strategies
- Harvesting and extraction methods
- Established communication channels and protocols including notification of authorities
- Problem identification and resolution strategies in relation to plant and equipment used in salvage operations
- Types of tools and equipment, and procedures for their safe use and maintenance
- Appropriate mathematical procedures for estimation and measurement
- Procedures for recording and reporting workplace information



## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can safely and efficiently use environmental care procedures to undertake fire salvage operations

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:
- following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice relevant to fire salvage operations
- following organisational policies and procedures relevant to environmental care requirements
- assessing salvage operation requirements including fire damage
- preparing for fire salvage operations
- performing a fire salvage operation in line with environmental care requirements
- recording and reporting all information and data related to the fire salvage operation
- using safe work practices
- safely using plant and equipment associated with fire salvage operations, including:
- harvesting plant and equipment
- advanced chainsaw harvesting techniques
- advanced 4WD skills

#### Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:

## **EVIDENCE GUIDE**

- workplace location or simulated workplace
- materials and equipment relevant to undertaking work applicable to this unit
- specifications and work instructions



## EVIDENCE GUIDE

### Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge
- Assessment may be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

## Range Statement

### 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, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

## RANGE STATEMENT

OHS requirements:

are to be in line with applicable Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices including required actions relating to forest fire
- manual handling including shifting, lifting and carrying
- use of tools and plant appropriate to a task and used to safe working procedures

Environmental requirements may include:

- legislation
- organisational policies and procedures
- workplace practices

Legislative requirements:

are to be in line with applicable Commonwealth, State or Territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

## RANGE STATEMENT

Organisational requirements may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- procedural manuals
- continuous improvement processes and standards
- OHS, emergency and evacuation procedures
- ethical standards
- recording and reporting requirements
- equipment use, maintenance and storage requirements
- environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)

Work order must include:

- instructions for the trimming, felling and despatching of salvaged trees, including merchandising
- directions on the treatment of non-merchantable trees and debris for the purpose of environmental care and site rehabilitation
- prescriptions for maintenance of soil and water
- wet weather restrictions

and may include:

- instructions for the environmental monitoring of work and procedures
- environmental care requirements relevant to the work
- any activities and directives prescribed under legislation or required for standard certification requirements or as a management priority such as:
  - soil erosion mitigation
  - track, road, drainage and crossing

Environmental care requirements may include:

## RANGE STATEMENT

maintenance

- weed management
- rehabilitation prescriptions
- watercourse protection
- flora and fauna management
- run-off minimisation
- buffer zone and filter strip maintenance
- protection of remnant habitat
- identification of cultural sites

## RANGE STATEMENT

Appropriate personnel may include:

- managers
- supervisors
- foremen
- operational staff
- administrative staff
- sub contractors
- clients

Environmental risks and hazards may include:

- spills
- leaks
- pollution
- planned and unplanned emissions
- soil compaction
- disturbance and erosion
- accidents
- disposal of waste
- damage or disruption to ecosystems
- displacement of plant or animals
- changes in land use
- fire risks and threats
- damage to habitats
- illegal vegetation clearing
- seed collection
- firewood gathering

Schedule is to include:

- plan
- timeline
- list of events to take place in conducting fire salvage operations

Operational activities may include:

- coupe mapping exercises
- site preparation
- establishment of stream or water course buffers, filter strips, contours, gullies, crossing and other landscape protection
- habitat, plant community, forest type protection
- fauna and flora protection
- timber dump
- snig track
- forwarding tracks
- temporary and permanent road

## RANGE STATEMENT

construction, use or maintenance

- fire management
- wet weather restrictions

and may be modified according to:

- weather conditions
- seasonal activity
- time frames
- condition of fire affected coup
- accessibility

## RANGE STATEMENT

Stability must include:

Equipment may include:

Communication may include:

Salvage

Regeneration must include:

Records and reports may include:

assessment of a tree to determine:

- whether or not it is safe to leave standing
- its merchantability
- how it should be felled
- chainsaws
- VHF&UHF radios
- GPS systems
- safety attire
- 4WD
- harvesting plant and equipment
- verbal or non-verbal language
- hand or other agreed signals
- eye contact with other operators or personnel
- active listening
- questioning to clarify and confirm understanding
- use of electronic communication devices
- radio communication
- signals used under fire management conditions

is the process of removing from a site, commercially viable trees that have been damaged by fire in such a way that leaves the site in a state of protection against further loss or damage to natural resources and in a state that rehabilitation can occur

- return of the area to a revegetated state
- protection of all environmental assets
- OHS policies and procedures
- quality outcomes
- hazards
- incidents
- equipment malfunctions
- and may be:

## RANGE STATEMENT

- manual
- computer based, or another appropriate organisational communication system

## Unit Sector(s)

Not Applicable

## Competency field

Competency field            Common Technical