



Australian Government

Department of Education, Employment and Workplace Relations

FPIHAR4204B Plan and coordinate fire salvage operations

Release: 1

FPIHAR4204B Plan and coordinate fire salvage operations

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to assess, plan and coordinate salvaging trees of a commercially viable size, immediately after a forest fire, before degradation and insect infestation occur. The unit includes directing tree fellers and trimmers

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

This unit replaces FPIHAR4204A Plan and coordinate fire salvage operations

Application of the Unit

Application of the unit

The unit involves planning and coordinating fire salvage operations in a forest or farm forest setting

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

Prerequisite units

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. Prepare for <i>salvage</i> operations	1.1. Applicable <i>Occupational Health and Safety</i> (OHS), <i>environmental</i> , <i>legislative</i> and <i>organisational requirements</i> relevant to planning and coordinating fire salvage operations are identified and followed 1.2. Local authority is contacted and salvage approval obtained 1.3. <i>Work order</i> is reviewed and checked with <i>appropriate personnel</i> 1.4. <i>Equipment</i> is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations 1.5. <i>Communication</i> with others is established and maintained in line with OHS requirements
2. Plan salvage operations	2.1. Location including map and grid references are checked, <i>land ownings</i> are obtained and <i>boundaries</i> established 2.2. <i>Topography</i> including slope, elevation, contours and soil type are investigated and reported 2.3. <i>Operational activities</i> including site preparation, environmental considerations and access are planned 2.4. <i>Environmental protection measures</i> for the landscape, soil and drainage are planned and instigated 2.5. <i>Extent of damage</i> caused by <i>fire</i> is assessed and reported 2.6. Estimation of <i>commercial viability</i> of tree <i>harvest and extraction</i> is calculated and reported 2.7. Clearing, trimming and felling operations are planned and communicated to harvesting personnel
3. Coordinate salvage operations	3.1. <i>Schedule</i> for salvaging is produced, checked and communicated 3.2. Track builders are directed to form access in line with the salvage schedule and plan 3.3. Clearing of burnt scrub and dangerous limbs is directed and monitored 3.4. Movement and whereabouts of personnel is monitored and work modified to be in line with OHS regulations 3.5. Tree, location and <i>stability</i> are assessed for

ELEMENT**PERFORMANCE CRITERIA**

- conditions likely to affect safety of felling activities
- 3.6. Fellers are directed to fall designated trees in line with the salvage plan and OHS regulations
- 3.7. Use of mechanical equipment is monitored to minimise carbon emissions
- 3.8. Logs are hauled from site and landscape is left in a safe and tidy condition to allow *regeneration* to occur

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 and maintain relevant tools, machinery and equipment; effectively assess salvage operation requirements including fire damage
- 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
- Problem solving skills sufficient to identify problems and equipment faults and 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 planning and coordinating fire salvage operations
- Environmental protection requirements, including the safe disposal of waste material, the recycling and re-use of timber with defects and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for planning and coordinating fire salvage operations
- Sustainable forest management and the role of fire salvage operations in the recovery of fire damaged forests
- Environmental risks and hazards of fire damaged forests
- Characteristics of trees and timber defects
- Assessment of fire damaged trees
- Fire salvage operations and strategies

REQUIRED SKILLS AND KNOWLEDGE

- Harvesting and extraction
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their use, operation and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace records and 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 plan and coordinate fire salvage operations within organisational requirements

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 planning and coordinating fire salvage operations
- following organisational policies and procedures relevant to planning and coordinating fire salvage operations
- planning and coordinating fire salvage operations in line with community expectations and operational requirements
- coordinating personnel to follow planning, communications and scheduling for fire salvage operations

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 follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - 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 must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- 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

Salvage

is the process of removing commercially viable trees from a site which has been damaged by fire and includes:

- minimising the impact of mechanical equipment on the environment
- leaving the site in a tidy and environmentally protected state ready for regeneration

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
- legislation
- organisational policies and procedures
- workplace practices

Environmental requirements may include:

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
 - quality assurance
 - procedural manuals
 - quality and continuous improvement processes and standards
 - OHS, emergency and evacuation procedures
 - ethical standards
 - recording and reporting requirements
 - equipment use and maintenance and storage requirements
 - environmental management requirements (waste disposal, recycling and re-use guidelines)
- Work order** is to include:
- instructions for trimming and felling
 - despatch of salvaged, felled trees from the work site

and may include:

- type
- size
- length
- quantity
- grade
- instructions for the environmental monitoring of work and procedures
- environmental care requirements relevant to the work

Appropriate personnel may include:

- supervisors
- suppliers
- clients
- colleagues
- managers
- local authorities

Equipment may include:

- basic assessment equipment
- computers
- safety attire

and is to include:

- procedures for equipment lock-out such as

RANGE STATEMENT

	protecting operators and co-workers from accidental injury by isolating the machine
Communication may include:	<ul style="list-style-type: none">• verbal and non-verbal language• constructive feedback• active listening• questioning to clarify and confirm understanding• use of positive, confident and cooperative language• use of language and concepts appropriate to individual social and cultural differences• control of tone of voice• body language
Land ownings	is the process of notifying and obtaining owner approval to commence harvesting operations
Boundaries	are designated forest allotments owned privately, by Government or by the forestry organisation and fall within survey pegs for the land allocated
Topography	is a map of the designated area showing terrain levels, contours, elevations, slopes, gullies and adjoining land parcels
Operational activities may include:	<ul style="list-style-type: none">• coupe map details• site preparation• streamside buffers• filter strips• contours• gullies• crossing points• habitat protection• rainforest protection• flora and fauna protection• landscape protection• soil and water protection• excluded areas• rubbish removal• permanent roads• temporary roads• landings• dumps

RANGE STATEMENT

	<ul style="list-style-type: none"> • snig tracks • forwarding tracks • adjoining land • wet weather restrictions • fire protection requirements
Environmental protection measures may include:	<ul style="list-style-type: none"> • ground growth • canopy • general forest lean • wind speed and direction • fallen trees • density of trees • ground slope • soil and water protection • ground hazards • obstacles • contingencies for modifying operations during wet or other adverse weather conditions
Extent of damage is to include:	<ul style="list-style-type: none"> • impact fire has had on a forest region • how fire has affected the trees • what fire has done to underlying scrub • how safe the forest is to enter
Fire may include:	fires caused by: <ul style="list-style-type: none"> • arson • accident • lightning strike • wildfires
Commercial viability	is the assessment of trees to determine their physical stability and worth as useable logs for further production activities
Harvest and extraction	are the methods of felling and removing felled logs from the work site with mechanical equipment, considering site conditions and specific log location
Schedule	is the plan, timeline and list of events to take place in conducting fire salvage operations
Stability	is the assessment of a tree to determine if it is safe to fall, based on how badly affected by fire damage it is

RANGE STATEMENT

Regeneration is the return of an area to a revegetated state, protecting its landscape, soil and drainage

Unit Sector(s)

Unit sector No sector assigned

Co-requisite units

Co-requisite units

Competency field

Competency field Harvesting and Haulage