



Australian Government

Department of Education, Employment and Workplace Relations

FPISAW3201B Treat timber

Release: 1

FPISAW3201B Treat timber

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to treat timber with authorised chemicals and to operate the treatment plant to complete treatment cycles

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 FPISAW3201A Treat timber

Application of the Unit

Application of the unit

The unit involves treating timber in a forest products factory 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 treating	1.1. Applicable Occupational Health and Safety (OHS), environmental, legislative and organisational requirements relevant to treating timber are identified and followed 1.2. Work order is reviewed and checked with appropriate personnel 1.3. Type and quantity of timber to be treated and chemicals to be used are assessed and acquired from the storage location 1.4. Equipment is selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer's recommendations 1.5. Treating cycles are planned in line with site procedures 1.6. Communication with others is established and maintained in line with OHS requirements
2. Treat timber	2.1. Pre start-up checks are carried out on equipment in line with site requirements 2.2. Water management procedures are applied 2.3. Moisture content of timber is tested in line with organisational procedures 2.4. Preservative solution strength is checked, maintained and adjusted for specified strength and volume 2.5. Treating plant is brought to full operating condition and operating parameters regularly checked in line with site requirements 2.6. Branding is completed and checked in line with regulatory requirements 2.7. Treated timber is safely handled and transferred to storage location 2.8. Timber treating process and equipment faults are recorded and reported to the appropriate personnel
3. Conduct operator maintenance	3.1. Treating plant shut down procedures are followed in line with OHS legislation and site procedures 3.2. Treating mechanisms are checked for effective condition 3.3. Chemicals are handled and stored in line with regulatory requirements and stock levels reported

ELEMENT**PERFORMANCE CRITERIA**

3.4. Treating area is kept clear of dust, shavings and debris in line with OHS requirements

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; efficiently and safely treat timber
- Communication skills and interpersonal techniques sufficient to interact appropriately with colleagues and others in the workplace
- Literacy skills sufficient to accurately record and report workplace information, and maintain documentation
- Numeracy skills sufficient to estimate, measure and calculate time required to complete a task
- 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 treating timber
- Environmental protection requirements, including the safe disposal of waste material, the safe use and storage of chemicals, minimising carbon emissions and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for treating timber
- Environmental risks and hazards
- Timber treating techniques
- Handling of treated products and chemicals
- Methods of visual inspection
- Characteristics of timber and chemicals
- Water and chemical management procedures
- Storage systems and labelling
- Established communication channels and protocols
- Problem identification and resolution strategies and common fault finding techniques
- Types of tools and equipment and procedures for their safe use, operation and

REQUIRED SKILLS AND KNOWLEDGE

maintenance

- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- 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 treat timber in line with 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 treating timber
- following organisational policies and procedures relevant to treating timber
- treating timber in readiness for storage and/or processing
- conducting operator maintenance on the treating equipment

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

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

EVIDENCE GUIDE

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.

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:

RANGE STATEMENT

- 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
- machine isolation and guarding
- 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
- 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

Organisational requirements
may include:

RANGE STATEMENT

	• equipment use and maintenance and storage requirements • environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
Work order is to include:	• instructions for timber treating
	and may include:
	• treating method • colour • type • width • length • thickness • quantity • 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
Timber may include:	• native timber species • imported timber species • dressed timber • in-the-rough timber • stress and non-stress graded timber • sleepers • logs • rounded poles • beams or laminated beams
Treating	is the process of impregnating preservative solution filled with chemicals into the timber to provide it with a durable resistance to weather and insect attack and may include: • full cell • modified cell • empty cell

RANGE STATEMENT

- double vacuum
- dip diffusion
- vat and sprays
- other processes developed by the enterprise

and is to include:

- handling techniques for products and chemicals in line with OHS regulations and environmental laws

Chemicals may include:

- those specified by the enterprise and that follow regulatory requirements
- light organic solvents

Storage locations may include:

- storage racks
- storage bays
- bins
- stacks
- pallet boxes
- modularised storage components
- temporary stacking bays (stand, frame or ground)

and may be divided into:

- standard product classification
- product designation
- size
- dimension
- stack number
- weight
- grade
- shelf life
- stock rotation position

Equipment may include:

- treaters
- vats
- ovens
- resin tanks
- effluent tanks

and is to include:

- procedures for equipment lock-out such as protecting operators and co-workers from accidental injury by isolating the machine from the power source

RANGE STATEMENT

Cycles	are the times taken for each stage of the process
Communication may include:	• 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
Pre start-up checks	are conducted to ensure: • oven and rack systems have been set-up correctly • systems are performing accurately and operating to optimum performance
Water management may include:	• stormwater • contaminated water • bore water • recycled dam water • town mains water
Moisture content	• is the amount of moisture maintained in timber or timber products after kiln drying or to avoid cracking and deforming • in Australia generally ranges between 10% in warmer, more humid climates to 14% in cooler climates
Preservative solution may include:	• water-borne solutions • oil-based solutions • solvent-based solutions
Treating plant	is the source of providing preservative solution to the timber in a controlled setting
Branding may include:	• burning • hammer impressions • ink • tags
Records and reports may include:	• treating requirements • charge records

RANGE STATEMENT

- product type
- size
- inspection
- grading and branding outcomes
- storage locations
- quality outcomes
- hazards
- incidents
- equipment malfunctions

and may be:

- manual
- using a computer-based system or other appropriate organisational communication system

Unit Sector(s)

Unit sector No sector assigned

Co-requisite units

Co-requisite units

Competency field

Competency field Sawmilling and Processing