

Australian Government

Department of Education, Employment and Workplace Relations

# FPISAW4203B Coordinate timber drying operations

Release: 1



## FPISAW4203B Coordinate timber drying operations

# **Modification History**

Not Applicable

# **Unit Descriptor**

Unit descriptor	This unit describes the outcomes required to coordinate and plan timber drying procedures, control the drying process, assess the timber and estimate processing required and check the processed timber
	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 FPISAW4203A Coordinate timber drying operations

# **Application of the Unit**

Application of the unit	The unit involves coordinating timber drying operations 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**

EL	EMENT	PERFORMANCE CRITERIA
	Plan drying procedures	1.1. Applicable <i>Occupational Health and Safety</i> (OHS), <i>environmental, legislative</i> and <i>organisational</i> <i>requirements</i> relevant to coordinating timber drying operations are identified and followed
		1.2. Variations in timber characteristics are assessed and <i>moisture content</i> measured and recorded
		1.3. <i>Timber drying</i> schedules are produced and applied in line with site procedures
		1.4. <i>Kiln management</i> procedures are planned and scheduled in line with site procedures and environmental requirements
		1.5. Process cycles are planned and prescribed
		1.6. <i>Communication</i> with others is established and maintained in line with OHS requirements
	Control drying operations	2.1. <i>Charge sheets</i> are checked and interpreted to ensure accuracy in line with final moisture content reading
		2.2. <i>Process trends</i> are checked and analysed for optimum performance
		2.3. <i>Seasoning chambers</i> are checked and controlled in line with standard operating procedures
		2.4. Drying operations, major problems and equipment faults are investigated and <i>recorded and reported</i> in line with site requirements
	Coordinate drying process	3.1. Drying operations and output are monitored to record possible process improvements based on moisture control and timber being processed
		3.2. Modifications are made to processing cycles to ensure optimum performance and communicated to operators
		3.3. Drying improvement modifications are documented and communicated in line with site procedures
		3.4. Charge details are obtained and recorded in line with site requirements
		3.5.Dried timber is directed to <i>storage</i> or <i>transferred</i> for further processing
		3.6. Operating logs and seasoning records are completed and maintained to site standards

# **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 assess, schedule and apply drying procedures; monitor drying operations and output, and modify as required; efficiently and safely coordinate timber drying operations
- 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 demonstrate appropriate response procedures to major problems and equipment faults

#### **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 coordinating timber drying operations
- Environmental protection requirements, including the safe disposal of waste material, minimising carbon emissions and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for coordinating timber drying operations
- Environmental risks and hazards
- Using energy effectively and efficiently
- Using material effectively and efficiently
- Timber drying operation procedures
- Kiln management methodologies
- Process cycles and modifications
- Timber characteristics and moisture content interpretation
- 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 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 coordinate timber drying operations 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:
	<ul> <li>following applicable Commonwealth, State or Territory legislative and regulatory requirements and codes of practice relevant to coordinating timber drying operations</li> <li>following organisational policies and procedures relevant to coordinating timber drying operations</li> <li>coordinating timber drying operations for the enterprise</li> <li>modifying timber drying operations for the enterprise</li> <li>coordinating personnel to follow planning, communications and scheduling for timber drying operations</li> </ul>
Context of and specific resources for assessment	<ul> <li>Competency is to be assessed in the workplace or realistically simulated workplace</li> <li>Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints</li> <li>Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context</li> <li>Assessment is to follow relevant regulatory or Australian Standards requirements</li> <li>The following resources should be made available: <ul> <li>workplace location or simulated workplace</li> <li>materials and equipment relevant to undertaking work applicable to this unit</li> <li>specifications and work instructions</li> </ul> </li> </ul>
Method of assessment	• Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package

#### **EVIDENCE GUIDE**

- 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.

#### **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

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

**Environmental requirements** may include:

#### Legislative requirements:

**Organisational requirements** 

may include:

	ethical standards
	• recording and reporting requirements
	• equipment use and maintenance and storage requirements
	<ul> <li>environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)</li> </ul>
Moisture content	is the amount of moisture maintained in timber or timber products after kiln drying to avoid cracking and deforming
Timber drying	is the process of:
	• placing timber in a heat controlled kiln to dry high levels of moisture from timber causing cell collapse followed by humidity generation to recondition timber to its former shape and desired EMC
	• in the case of hardwood, final kiln drying to required moisture content
Kiln management may include:	<ul> <li>low temperature kilns</li> <li>conventional</li> <li>high temperature kilns and vacuum dryers</li> <li>setting process evalue and charge rates</li> </ul>
Process cycles	• setting process cycles and charge rates
Trocess cycles	are the times taken for each stage of the process
<b>Communication</b> may include:	<ul><li>verbal and non-verbal language</li><li>constructive feedback</li><li>active listening</li></ul>
	<ul> <li>questioning to clarify and confirm understanding</li> </ul>
	• 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
Charge sheets are to include:	<ul> <li>records of the treatment plant charge</li> <li>amount of power and energy developed and used</li> </ul>
Process trends are to include:	• mapping processing conditions to establish trends
	• using this information for modifications

#### Seasoning chambers

**Records and reports** may include:

are the various compartments or rooms of a kiln that are independently controlled

- coordinating outcomes
- operating logs
- seasoning records
- charge sheets
- material movement
- despatch outcomes
- storage locations
- quality outcomes
- hazards
- incidents
- equipment malfunctions

and may be:

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

**Transferral** may include:

the use of:

conveyor belt systems

Storage may include:

- track systems
- lifting equipment
- lifting equipment such as:
  - fork lifts
  - slings
  - trolley jacks
  - gantry cranes
  - loaders
- assistance with lifting such as:
  - the involvement of two or more personnel to lift materials manually or to guide the movement of mechanical equipment

## **Unit Sector(s)**

Unit sector

No sector assigned

# **Co-requisite units**

**Co-requisite units** 

## **Competency field**

**Competency field** 

Sawmilling and Processing