



Australian Government

FWPSAW4208 Plan for and coordinate timber kiln drying operations

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 8.0.

Application

This unit of competency describes the skills and knowledge required to plan, coordinate and evaluate timber kiln drying operations.

The unit applies to individuals who plan and coordinate timber drying operations in a wood products work environment.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Sawmilling and Processing (SAW)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan for implementing timber kiln drying operations	1.1 Confirm type of kiln, kiln controls and workplace drying and kiln management procedures 1.2 Review drying and production schedule and confirm production targets, specifications and performance indicators

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm workplace health and safety, quality and environmental protection practices and/or procedures for work task 1.4 Confirm legislation, standards and codes of practice relevant to timber drying operations 1.5 Identify hazards and associated risks, and implement corrective actions according to workplace procedures 1.6 Inspect raw materials, identify possible production and quality implications and communicate variations to production methods to team members 1.7 Assess pre-drying suitability of product, and remove non-conforming product according to workplace procedures 1.8 Communicate drying and production schedule, production targets, specifications and performance indicators to team members 1.9 Maintain communication with team members to ensure production schedule and workplace health and safety, environmental protection and quality requirements are met 1.10 Plan process cycles and develop timber drying schedule
2. Coordinate timber kiln drying operations	2.1 Confirm capability, capacity and components of timber drying kiln and implement standard operating procedures for kiln 2.2 Assist team members to identify faults and rectify or report production problems 2.3 Oversee loading of timber according to quantities scheduled for drying and workplace procedures 2.4 Check and analyse process trends 2.5 Monitor performance of operational personnel according to workplace procedures 2.6 Implement modifications for optimum performance in drying process 2.7 Check and control seasoning chambers throughout drying process 2.8 Assess and confirm timber drying performance, and identify complying product according to workplace procedures 2.9 Oversee transfer and storage of dried timber 2.10 Respond to breakdowns, disruptions and unplanned events according to workplace procedures 2.11 Complete operating logs and seasoning records

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	2.12 Investigate, record and report production problems and equipment faults
3. Oversee maintenance and inventory management requirements	3.1 Monitor implementation of routine and preventative maintenance and cleaning requirements 3.2 Maintain product and material inventory levels to meet production and contingency requirements
4. Evaluate timber kiln drying operations	4.1 Analyse data and observations on drying operations, faults, workplace health and safety incidents and output to identify opportunities for process improvement 4.2 Report on production, safety, environment and quality metrics to appropriate personnel according to workplace procedures 4.3 Seek comments and feedback from team members to identify opportunities for process improvement 4.4 Analyse feasibility of potential process improvements 4.5 Document process improvements and communicate to appropriate personnel according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret technical documents and workplace policies and procedures relevant to timber drying operations
Writing	Complete workplace documents on routine and non-routine matters for a variety of audiences related to timber drying operations
Oral communication	Use appropriate vocabulary to communicate on technical and work team performance matters related to timber drying operations

Skill	Description
Numeracy	Perform routine calculations related to quantity, temperature and drying times

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSAW4208 Plan for and coordinate timber kiln drying operations	FWPSAW4203 Coordinate timber drying operations	Revised unit title Minor revisions to Application Updated Elements, Performance Criteria, Foundation Skills, Performance Evidence, Knowledge Evidence and Assessment Conditions	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPSAW4208 Plan for and coordinate timber kiln drying operations

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has planned, coordinated and evaluated two timber drying operations.

In performing these tasks, the individual has:

- communicated and coordinated personnel effectively to follow workplace procedures, workplace health and safety and environmental protection practices and/or procedures, and planning and scheduling required for timber drying operation
- complied with legislation, standards and codes of practice relevant to timber drying operations
- monitored timber drying operations and output against confirmed production targets, specifications and performance indicators, and identified production and equipment problems and faults
- resolved one real or hypothetical problem in the timber drying operation
- recorded and reported production information including output, quality and faults
- evaluated timber drying operation and suggested one process improvement
- maintained inventory levels and coordinated equipment maintenance.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- hazards and associated risks with timber drying, and risk control strategies as identified through risk assessments, manufacturer technical information, regulations and industry health and safety guides
- key requirements of legislation, standards and codes of practice relevant to timber drying operations
- workplace procedures, policies and standards relevant to planning and coordinating timber drying regarding:

- health and safety, including the use of personal protective equipment (PPE)
- environmental protection, including safe disposal of waste material and efficient use of energy
- quality assurance, including chain of custody requirements
- communication channels and protocols to communicate with team members
- recording and reporting information on output, quality, workplace health and safety and equipment faults
- types, uses, operation, capability, capacity and components of timber drying kilns from workplace environment
- timber characteristics in relation to drying ease and susceptibility to drying degrade
- principles and purpose of timber drying process and its effect on wood end-use
- advantages and limitations of timber drying processes
- timber drying methods
- types of biological attack, their impact on visual appearance and their degrading effect on wood, including:
 - decay
 - mould
 - fungi
- effect of surface mould and sapstain fungi on drying
- factors for consideration when scheduling kiln charges to optimise production throughputs
- timber drying kiln plant control and product testing equipment
- timber moisture content, including fibre saturation point and equilibrium moisture content
- impact of moisture content and moisture gradient on the end-use effectiveness of timber
- timber drying defects, reasons and control measures
- influence of temperature, relative humidity and rate of air circulation on drying rate
- target moisture content for major product groups according to relevant Australian Standards
- kiln drying schedules for drying timber at optimal rate and target moisture content without causing unacceptable degrade
- methods for problem identification, including equipment failures at process stages, bottlenecks in production process and product variations, and resolution strategies
- process improvement for timber drying, including:
 - data
 - methods
 - participative approaches
 - communication.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:

- skills must be demonstrated in a timber processing plant, a timber product manufacturing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - timber drying equipment
 - timber for drying
 - PPE required for coordinating timber kiln drying operations
 - computers, keyboards, printers and software used to prepare planning and production documents
- specifications:
 - templates for documenting relevant information on timber kiln drying
 - production schedule for timber kiln drying
 - workplace procedures for timber kiln drying
 - workplace health and safety and environmental protection policies and/or procedures applicable to timber kiln drying
- relationships:
 - work team to communicate requirements related to timber kiln drying operations.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>