



Australian Government

Department of Education, Employment and Workplace Relations

FPPRES210A Prepare and operate the woodchip production system

Release: 1

FPPRES210A Prepare and operate the woodchip production system

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to prepare and operate the woodchip production system in the pulp and paper industry

General legislation, regulatory, licensing and certification requirements applicable to this unit are detailed in the range statement

Specific high risk (and non-high risk) load shifting licensing requirements for this unit may be applicable and are to be met separately and prior to the achievement of this unit

Application of the Unit

Application of the unit

This unit applies to operators who prepare and operate the woodchip production system in the pulp and paper industry. This work typically involves complex integrated equipment and continuous operations

This unit generally applies to those who:

- conduct pre-startup system checks
- start up system for production run
- monitor and maintain chipping system operation
- record and document machine performance and production data, and
- conduct a plant shutdown

to meet safety, quality and productivity requirements

It does not include receiving and unloading materials, distributing woodchips or troubleshooting and rectifying primary resource operations

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. Conduct pre-startup system checks	1.1. Pre-startup system checks are conducted within Occupational Health and Safety (OHS) regulations, environmental and safe working requirements/practices, Standard Operating Procedures (SOP), and housekeeping requirements 1.2. External inspection and pre-operational checks of the woodchip system are carried out 1.3. Operator level maintenance schedules are carried out as required 1.4. Isolations are removed in accordance with site procedures if required 1.5. Monitoring devices and alarm systems are confirmed to be operational 1.6. Relevant personnel are notified of impending startup 1.7. Logs to be processed are identified and loaded to ensure correct presentation
2. Start up system for production run	2.1. System for production run is started up within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements 2.2. Equipment, conveyors, transfer system and operational monitoring equipment pre-startup checks are carried out 2.3. Transfer equipment, bins and hoppers are checked to ensure prevention of chip contamination as required 2.4. System is started 2.5. Logs are docked as required
3. Monitor and maintain chipping system operation	3.1. Chipping system operation is monitored and maintained within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements 3.2. Logs and conveyors are monitored to achieve optimum flow 3.3. Supply of logs is co-ordinated and maintained to ensure production requirements are met 3.4. Equipment operation is monitored electronically and visually to ensure operating conditions are continually maintained 3.5. Potential blockage and/or jamming situations are identified and appropriate action is taken to rectify

ELEMENT	PERFORMANCE CRITERIA
	3.6. Woodchip quality is continually monitored as required
	3.7. Woodchip transfer to storage system is monitored and maintained
	3.8. Storage levels are monitored and maintained as required
4. Record and document machine performance and production data	4.1. Machine performance and production data is recorded and documented within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements
	4.2. Production and quality records are maintained as required
	4.3. Data is entered into computer system as required
	4.4. Problems or variations are communicated to relevant personnel
5. Conduct a plant shutdown	5.1. Plant shutdown is conducted within Occupational Health and Safety (OHS) regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements
	5.2. Shutdown plan is communicated with relevant personnel
	5.3. Shutdown procedures are carried out
	5.4. Cause of uncontrolled shutdown is identified and rectified
	5.5. Shutdown details are recorded as required

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the skills and knowledge required for this unit.

Required skills

- Uses required forms of communication in preparing and operating the woodchip production system
- Reads and interprets required documentation, procedures and reports
- Prepares written information and enters data to support groups and teams
- Accesses, navigates and enters computer-based information

REQUIRED SKILLS AND KNOWLEDGE

- Responds to video and other monitoring devices and alarms
- Interprets instruments, gauges and data recording equipment
- Identifies and actions problems within level of responsibility
- Follows equipment maintenance procedures including recognition, checking, fixing and reporting faults
- Identifies and monitors process control points
- Maintains situational awareness in the area
- Maintains chip quality and machine production rate or schedules
- Prepares, starts up, and monitors operations
- Follows procedures for woodchip operation
- Monitors and maintains waste systems
- Coordinates and plans shutdown activity
- Responds to problems associated with plant shutdown and uncontrolled shutdown to ensure safety quality and productivity
- Sets up equipment or plant to specification as required
- Operates high risk (and non-high risk) load shifting equipment as required
- Uses measuring equipment as required
- Analyses and uses sensory information to adjust process to maintain and co-ordinate safety, quality and productivity
- Uses electronic and other control systems to control equipment and processes as required

Required knowledge

- Procedures, regulations and legislative requirements relevant to woodchip production operations including OHS, environmental including relevant sustainability requirements/practices, SOP, isolation procedures, safe working requirements, risks and hazard identification and housekeeping
- Quality standard requirements
- Relevant forms of communication
- Basic problem-solving techniques consistent with level of responsibility
- Equipment fault identification and corrective action
- Working knowledge of woodchip production system, area layout and associated services sufficient to carry out docking and debarking processes within level of responsibility
- Required responses to all unplanned shutdowns (e.g. power outage, mechanical breakdown, blockages, jamming, air supply, control system failure) to ensure safety quality and productivity
- Process and procedures for plant shutdowns and uncontrolled shutdowns
- Plant and machinery functions and operations
- Emergency procedures and responses
- Process and procedures for woodchip production
- Application of high risk (and non-high risk) load shifting equipment as required

REQUIRED SKILLS AND KNOWLEDGE

- Sensory information that indicates a deviation from standard operating parameters
- Sufficient knowledge of electronic and other control systems operation and application to make appropriate adjustments that control the woodchip production system, within level of responsibility

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

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

Evidence should be relevant to the work. It should satisfy the requirements of the elements and performance criteria and include consideration of:

- the required knowledge and skills tailored to the needs of the specific workplace
- applicable OHS regulations, environmental and safe working requirements/practices, SOP and housekeeping requirements
- applicable aspects of the range statement
- practical workplace demonstration of skills in preparing and operating woodchip production systems

Context of and specific resources for assessment

A workplace assessment must be used to assess:

- the application of required knowledge on the job
- the application of skills on the job, over time and under a range of typical conditions that may be experienced in woodchip production systems

Access to the full range of equipment involved in integrated continuous manufacturing of woodchip production systems in a pulp or paper mill is required

Method of assessment

A combination of assessment methods should be used. The following examples are appropriate for this unit:

- observation of applied skills and knowledge on the job
- workplace demonstrations via a mock-up or

EVIDENCE GUIDE

- simulation that replicate part/s of the job
- answers to written or verbal questions about specific skills and knowledge
- third-party reports from relevant and skilled personnel
- written evidence e.g. log sheet entries, checklist entries, test results

Assessment processes and techniques must be culturally appropriate and in keeping with the language and literacy capacity of the learner and the work being performed. This includes conducting an assessment in a manner that allows thoughts to be conveyed verbally so that the learner can both understand and be understood by the assessor (e.g. use plain English and terminology used on the job)

A holistic assessment with other units relevant to the pulp and paper industry, mill and job role is recommended

Additional information on approaches to assessment for the pulp and paper industry is provided in the Assessment Guidelines for this Training Package

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.

Productivity requirements may include:

- energy efficiency
- waste minimisation
- evaporation minimisation, including landfill and waste water reduction
- environmentally safe waste disposal
- consideration of resource utilisation, including fibre efficiency
- minimising delays

RANGE STATEMENT

- chemical recovery maximisation
 - meeting key performance indicators
 - line speed
 - handovers
 - quality checks
 - meeting output targets i.e. net tonnes per employee per annum
 - machine/process time availability i.e. time the machine or process is making product
 - machine/process production rate
- Materials and supplies may include:
- hardwood or softwood logs
 - supplies
 - parts
- Equipment may include:
- chipper
 - hogger
 - conveyor feed systems
 - chipscreens
 - hydraulic cutting equipment
 - blades
 - chainsaws
 - magnetic detectors
 - silos
 - hopper and storage systems
 - chip spreaders and slingers
 - front end loader trailer or tipper, articulated loader, tracked dozer/front end loader, forklift, side loader, mobile crane, rigid loader, log loader, straddle truck
 - fork lift attachments, crane hooks, chains, slings and straps, grabs, winches
 - docking saw
 - bark transferring system
 - debarking machinery
 - drying ovens
 - sizing screens
 - video monitoring
 - electronic weighing and measuring equipment
 - computer systems
 - electronic screens and alarms
 - process control systems
 - analogue and digital instrumentation

RANGE STATEMENT

- fully automated, semi-automated, manually operated plant and equipment appropriate to the woodchip production system
- Accessories may include:
 - protective and high visibility safety clothing and equipment
 - break down tools and equipment
 - electronic communication equipment
- Electronic control systems may include:
 - Digital Control System (DCS)
 - touch screens
 - robotics
- Legislation, regulatory, licensing and certification requirements may include:
 - OHS and environmental requirements (local, state and commonwealth)
 - activity or task specific high risk (and non-high risk) load shifting licensing requirements
- Documentation, procedures and reports may include:
 - SOP
 - quality procedures
 - oil or chemical spills and disposal guidelines
 - plant isolation documentation
 - safe work documentation e.g. plant clearance, job safety analysis, permit systems
 - enterprise policy, procedures and guidelines
 - environmental sustainability requirements/practices
 - plant manufacturing operating manuals
 - work orders
 - tally sheets
 - truck delivery dockets
 - invoices
 - non-conformance reports
 - test results and reports
 - log sheets (production/equipment)
 - equipment performance data
 - tonnage, input and conversion
 - sampling and test reports
 - Material Safety Data Sheets (MSDS)
 - process and instrument diagrams
- Maintenance may include:
 - operator level maintenance as per site agreement
 - operator maintenance schedules
 - maintenance systems
 - maintenance suppliers

RANGE STATEMENT

	proactive maintenance strategies e.g. Total Productive Maintenance (TPM), Reliability Centred Maintenance (RCM)
Actions may include:	- process adjustments - reporting to authorised person - rectifying problem within level of responsibility
Communications may include	interaction with: - work area personnel - internal/external customers and suppliers - team members - production/service coordinator - maintenance service - operational management - statutory authorities
Situational awareness may include	awareness of: - traffic - pedestrians - location of equipment - product - hazards - obstruction - unexpected movement
Sensory information may include:	- visual - sound - feel - touch - smell - vibration - temperature
Forms of communication may include:	- written e.g. log books, emails, incident and other reports, run sheets, data entry - reading and interpreting documentation e.g. SOP, manuals, checklists, drawings - verbal e.g. radio skills, telephone, face to face, handover - non-verbal e.g. hand signals, alarms, observations - signage e.g. safety, access

Unit Sector(s)

Not Applicable