

### **FPP98**

### Pulp and Paper Manufacturing Industry Competency Standards

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Published by: Australian Training Products Ltd

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First Published October 1998

STOCKCODE; 6570001STD

Printed by Print Synergy Australia Pty Ltd, MELBOURNE AUSTRALIA

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## HANDLING AND PREPARING PRIMARY RESOURCES

### **UNITS** FPPRES1A Receive material FPPRES2A Unload materials Prepare woodchip line for production FPPRES3A FPPRES4A Prepare logs for chip production FPPRES5A Operate woodchip production system FPPRES6A Conduct woodchip quality assessments FPPRES7A Co-ordinate system shut down FPPRES8A Distribute woodchips FPPRES9A Troubleshoot and rectify resource handling systems

### **PLEASE NOTE:**

A single Range Statement has been prepared to cover all Units in Handling and Preparing Primary Resources. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

### RANGE STATEMENT

The coverage of resource handling and preparation includes the following systems:

- b Units FPPRES1A & FPPRES2A
- · resource receival and unloading system
- · finished goods handling system
- b Units FPPRES3A FPPRES9A
- · woodchip system
- · screening and rechipping system
- bark recovery system
- debarking system
- woodchip and hopper storage system
- chipping system
- · waste recovery system

### Materials/supplies:

 Materials may be hardwood or softwood logs, lapped pulp, waste paper, woodchips, finished supplies, parts, complete orders.

Weighbridge: [excludes Units FPPRES2A - FPPRES9A]

Equipment: [excludes Units FPPRES1A & FPPRES2A]

- Chipper, hogger, conveyor feed systems, chipscreens, hydraulic cutting equipment, blades, chainsaws, magnetic detectors, silos, hopper and storage systems.
- · Docking saw, debarking machinery.
- · Chip spreaders/slingers, silos, hopper and storage systems.
- Trailer/tipper, articulated loader, tracked dozer/front end loader, forklift, side loader, mobile crane, rigid loader, log loader, straddle truck, mobile crane.
- Accessories may include protective and high visibility safety clothing and equipment, break down tools and equipment, electronic communication equipment.
- Testing equipment may include drying ovens, sizing screens, computer processing equipment.

### Attachments: [excludes Unit FPPRES1A]

• Fork lift attachments, crane hooks, chains, slings and straps, grabs, winches.

#### Legislation, policy and procedures:

- Enterprise policy, procedures and guidelines.
- OH&S and environmental regulatory requirements (state and commonwealth).
- Quality assurance requirements.
- Standard Operating Procedures (SOP).

### Documentation/procedures/reports:

- Standard Operating Procedures (SOP).
- Weighbridge dockets, work orders, tally sheets, truck delivery dockets, invoices, SOP, non-conformance reports, test results/reports.
- Log sheets (production/equipment), equipment performance data, tonnage/input/ conversion.
- Sampling and test reports. [excludes Units FPPRES1A & FPPRES2A]
- Material Safety Data Sheets (MSDS).
- Pile survey documents. [excludes Units FPPRES1A-FPPRES5A, FPPRES7A]
- Process and instrument diagrams. . [excludes Units FPPRES1A & FPPRES2A]

### Maintenance:

- Operator level maintenance as per site agreement.
- · Operator maintenance schedules.
- Maintenance systems.

#### Sampling/testing:

Visual assessments of materials, for example size, bark.

- Testing and verification of video, monitoring, and alarm systems operation.
- · Chip size.
- Contamination detection.
- In process testing, for example moisture content, chip furnish, density.

### Technology:

- Enter/extract/file data into computer system.
- Electronic alarms and video monitoring.
- Electronic weighing and measuring equipment.

### **Communication channels:**

- Internal/external customers, work area personnel.
- Team members

- Maintenance services
- Production/service co-ordinator.

### **Unit FPPRES1A: Receive Materials**

ELEMENTS	PERFORMANCE CRITERIA
FPPRES1A.1 Check, weigh and record load data.	<ul> <li>Trucks delivering loads are identified, inspected, documents checked, and load accepted.</li> <li>Load data, estimated weights or volumes are calculated and recorded.</li> <li>Non-conforming loads are handled in accordance with Standard Operating Procedures.</li> <li>Confirmation of delivery record is obtained from truck driver.</li> </ul>
FPPRES1A.2 Direct trucks for unloading.	<ul> <li>Trucks are directed to appropriate unloading area, and workforce is notified of deliveries requiring unloading.</li> <li>Truck traffic in the area is monitored and unacceptable movement is rectified.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains load types, specifications and characteristics.
- Enters data and uses recording systems.
- · Calculates weights.
- Operates materials handling equipment and procedures.
- Explains area layout.
- · Interprets data.
- Demonstrates ability to control traffic within specified work area.
- Establishes and maintains a safe work environment and complies with all SOP and OH&S requirements.
- · Directs trucks to appropriate locations for unloading.
- Calculates and documents accurately in accordance with enterprise requirements.
- Communicates effectively with truck and personnel.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **Unit FPPRES2A: Unload Materials**

ELEMENTS	PERFORMANCE CRITERIA			
FPPRES2A.1 Conduct unloading processes.	<ul> <li>Load is inspected for movements and safest unloading sequence is determined.</li> <li>Load shifting equipment is checked, set up and prepared for operation.</li> <li>Materials are lifted and unloaded maintaining load and equipment stability.</li> <li>Damage to raw materials, equipment, or vehicle is reported according to company procedures.</li> <li>Load/vehicle lifting equipment performance is monitored for unsatisfactory or hazardous operation.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>			
FPPRES2A.2 Sort and stack materials.	<ul> <li>Materials are identified and assessed for immediate use or storage.</li> <li>Materials are moved to appropriate stacking locations consistent with type, quality and stock rotation requirements.</li> <li>Stacks are constructed to provide stability and minimise problems.</li> <li>Provision for decks, storage bays and access for lifting equipment is made when storing.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>			
FPPRES2A.3 Record/tally unloading operations data.	<ul> <li>Materials are confirmed and recorded</li> <li>Storage areas are marked as required.</li> <li>Tally sheets and reject stock documentation is maintained as required.</li> </ul>			

- Explains load types, specifications and characteristics.
- · Enters data and uses recording systems.
- Explains stocking procedures/implications/requirements.
- Uses identification, classification and tagging systems.
- Operates materials handling equipment and procedures.
- Explains deck/storage bay requirements.
- Explains enterprise emergency and evacuation procedures.
- Describes dangerous goods handling and storing requirements.
- Explains area layout.
- Interprets data.
- Stacks and stores materials as required.
- · Communicates with area personnel.
- Uses enterprise work practices and procedures.
- Selects appropriate actions for handling non-conformance loads.
- Demonstrates a knowledge of area and unloading areas.
- · Plans, moves and stacks materials efficiently.
- Minimises handling to meet loading, processing, and stock rotation requirements.
- Delivers materials as required, to meet production requirements.
- · Maintains machinery and load receipt documentation effectively.
- Demonstrates approved manual handling techniques and complies with all SOP.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPRES3A: Prepare Woodchip Line for Production

ELEMENTS	PERFORMANCE CRITERIA			
FPPRES3A.1 Interpret production requirements.	<ul> <li>Production requirements/specifications are identified from mill documentation.</li> <li>Log supply requirements are established with log yard personnel, if appropriate.</li> </ul>			
FPPRES3A.2 Conduct start up system checks.	<ul> <li>External inspection and pre-operational checks of the woodchip system are carried out.</li> <li>Operator level maintenance schedules are carried out as independent requirements.</li> <li>Isolations are removed in accord standard operating procedures.</li> <li>Woodchip system is prepared for start up.</li> <li>Monitoring devices and alarm systems are confirmed as operational.</li> <li>Relevant personnel are notified of impending start up.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>			
FPPRES3A.3 Implement area housekeeping requirements.	<ul> <li>Potential hazards and obstructions are identified and cleared to designated area.</li> <li>Infeed area is regularly cleared of debris.</li> <li>Cleaning routines and schedules are met and comply with worksafe practices and OH&amp;S requirements.</li> <li>Chemical/Hazardous materials as removed and disposed in accord with SOPs.</li> </ul>			

- Interprets mill documentation.
- · Explains system set up procedures.
- Operates equipment.
- · Implements confined space requirements.
- Explains risks and hazards requirements.
- Explains equipment fault rectification procedures.
- Describes causes and effects of operational equipment faults and takes appropriate rectification action.
- Demonstrates ability to maintain a safe and clean work area.
- · Works harmoniously with other personnel.
- Identifies and rectifies problems associated with chipping operations
- Demonstrates ability to prepare woodchip line in production.
- · Demonstrates isolation and lockout procedures.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPRES4A: Prepare Logs for Chip Production

ELEMENTS	PERFORMANCE CRITERIA			
FPPRES4A.1 Set up for docking and/or debarking and associated transfer equipment.	<ul> <li>Pre-start up checks on debarking and transfer equipment completed.</li> <li>Logs to be processed are identified and loaded.</li> <li>Equipment is started, checked and adjusted to suit loaded logs.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>			
FPPRES4A.2 Operate and monitor the docking and/or debarking processes.	<ul> <li>Logs are loaded and docked where appropriate.</li> <li>Logs are sorted on infeed conveyor and manoeuvred to ensure correct presentation.</li> <li>Logs are visually assessed to determine suitability for debarking.</li> <li>Non-compliance logs are removed for re-preparation in accordance with SOP.</li> <li>Debarking processes are operated to remove bark from logs.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>			
FPPRES4A.3 Monitor and maintain production flow.	<ul> <li>Supply of logs is co-ordinated and maintained to ensure production requirements are met.</li> <li>Conveyors and logs are monitored to provide optimum flow.</li> <li>Debarked logs are removed and/or directed for further processing.</li> <li>Bark is removed and transferred to storage for distribution.</li> <li>Production and quality records are maintained.</li> </ul>			

- Demonstrates safe equipment/systems operation.
- · Explains quality standards requirements.
- Implements equipment maintenance procedures and fault rectification.
- Explains log preparation procedures and purpose.
- Implements non-conformance action requirements.
- Identifies and rectifies problems associated with the broad range of docking and debarking conditions.
- Maintain production quality and schedules.
- Demonstrates ability to accurately assess logs.
- Sets up equipment/plant to specification.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPRES5A: Operate the Woodchip Production System

ELEMENTS	PERFORMANCE CRITERIA				
FPPRES5A.1 Start up system for production run.	<ul> <li>Equipment, conveyors/transfer system and operational monitoring equipment pre-start-up checks are carried out.</li> <li>Transfer equipment, bins and hoppers are checked to ensure prevention of chip contamination.</li> <li>System is started in accordance with Standard Operating Procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>				
FPPRES5A.2 Monitor and maintain chipping system operation.	<ul> <li>Log and chip conveyors are monitored for material flow.</li> <li>Equipment operation is monitored electronically and visually to ensure operating conditions are continually maintained.</li> <li>Potential throat jamming situations are identified and appropriate action is taken to rectify.</li> <li>Woodchip quality is continually monitored for confirmation with production specifications.</li> <li>Woodchip transfer to storage system is monitored and maintained.</li> <li>Storage levels are monitored and maintained.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>				
FPPRES5A.3  Record/docum ent machine performance and production data.	<ul> <li>Equipment and system performance log book is maintained as required.</li> <li>Data is entered into computer system.</li> <li>Problems or variations are communicated to relevant personnel.</li> </ul>				

- Demonstrates safe equipment/systems operation.
- Explains quality standards requirements.
- Implements equipment maintenance procedures and fault rectification.
- Explains log preparation procedures and purpose.
- Implements non-conformance action requirements.
- Explains causes and effects of system power stand rectification requirements.
- Accurate log assessments and equipment/plant settings.
- Demonstrated ability to preparation, start-up, and monitor operations.
- Maintain chip quality and machine production rate/schedules.
- · Responds to video and other monitoring and alarm devices.
- Maintain waste systems.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

## Unit FPPRES6A: Conduct Woodchip Quality Assessments

ELEMENTS	PERFORMANCE CRITERIA			
FPPRES6A.1 Conduct routine visual assessments of woodchips.	<ul> <li>Chips are visually assessed against specification requirements.</li> <li>Potential problems with chip characteristics and contamination are identified and reported.</li> <li>Chip samples are identified and isolated from mixing and contamination.</li> <li>Sampling records are completed/entered as required.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>			
FPPRES6A.2 Conduct in process tests.	<ul> <li>Chip specification requirements are identified from production schedules and orders.</li> <li>Chips are tested for compliance with specifications.</li> <li>Chip samples are stored as required by the enterprise.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>			
FPPRES6A.3 Report and follow up test results.	<ul> <li>Test results are interpreted, recorded/entered, and communicated to relevant personnel.</li> <li>Out-of-specification test results are reported and procedures for rectification are initiated.</li> <li>Test sampling is modified to accommodate production changes.</li> <li>Recommendations are made to relevant personnel for rectification of system processes and operation.</li> </ul>			

- · Explains quality standards.
- Implements test procedures and sampling requirements.
- Operates test equipment.
- Describes effects of contaminates on the pulping processes and customer finished product.
- Prepares, records, reports and makes recommendations.
- Works harmoniously with other personnel.
- Records test samples.
- · Collects samples safely.
- Assesses chip production, storage and handling processes and procedures.
- Interprets test results against specifications and initiates corrective action.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### Unit FPPRES7A: Co-ordinate System Shutdown

ELEMENTS	PERFORMANCE CRITERIA
FPPRES7A.1 Conduct a planned shutdown.	<ul> <li>Shutdown is planned in accordance with Standard Operating Procedures.</li> <li>Work plan is communicated with relevant personnel.</li> <li>Shutdown procedures are co-ordinated in accordance with SOP.</li> <li>Plant is left in a safe condition for access.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPRES7A.2 Conduct an uncontrolled shutdown.	<ul> <li>Cause of shutdown is identified, isolated and rectified according to SOP.</li> <li>Safety of personnel is secured and confirmed in accordance with SOP.</li> <li>Shutdown of system or appropriate sections/plant is completed in accordance with SOP and relevant personnel are notified.</li> <li>Plant is left in a safe condition for access.</li> </ul>

- Explains emergency procedures and responses.
- Implements shutdown procedures according to specific situations.
- Explains plant and machinery functions and operation.
- Co-ordinates and plans shutdown activity.
- · Communicates clearly with relevant personnel.
- Works harmoniously with other personnel.
- Explains causes and effects of system faults and rectifies requirements.
- Responds problems associated with the broad range chipping operations.
- Responds to video and other monitoring and alarm devices.
- · Monitors waste systems.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **Unit FPPRES8A: Distribute Woodchips**

ELEMENTS	PERFORMANCE CRITERIA			
FPPRES8A.1 Plan woodchip distribution.	<ul> <li>Future storage size is estimated from production and distribution schedules.</li> <li>Filling or distribution patterns are planned to enable maximum woodchip storage density.</li> <li>Requirements for specific sequences in filling deposit areas are identified.</li> <li>Direction and extent for distribution and contraction is planned and confirmed with relevant personnel.</li> <li>Chip distribution requirements are estimated considering the reach and limitations of the chip slinging/chip moving equipment.</li> </ul>			
FPPRES8A.2 Start up transfer equipment and chip distributor.	<ul> <li>Pre start up checks are completed for conveyors, chip distributor, and wheeled or tracked vehicles.</li> <li>Isolations are removed in accordance with standard operating procedures.</li> <li>Deposit areas are checked to ensure clearance for start up.</li> <li>Other operators are informed of impending start up.</li> <li>Conveyors and chip spreading processes are started and correct transfer of woodchips is confirmed.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>			
FPPRES8A.3 Distribute woodchips to storage facility.	<ul> <li>Equipment is prepared for distribution of woodchips.</li> <li>Storage is inspected to identify hazards within the vehicle operational area.</li> <li>Notice of impending operation is communicated to relevant personnel.</li> <li>Chip distribution is manoeuvred to enable filling or distribution over required area.</li> <li>Woodchips are distributed to storage facilities.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>			
FPPRES8A.4 Monitor storage and distribution.	<ul> <li>Conveyor operation and material flow is regularly monitored to ensure flow rates are maintained.</li> <li>Chip samples are selected for analysis to ensure quality is maintained to storage locations.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> <li>Production and quality records are completed as required.</li> </ul>			

- · Operates plant and equipment.
- Implements Standard Procedures.
- Explains safety requirements and hazards prevention.
- Explains machine/plant maintenance requirements and procedures.
- Describes chip pile segregation purpose and techniques.
- · Identifies wood types and grades.
- Works harmoniously with other personnel.
- Implements isolation and lockout procedures.
- Chips are selected and directed to appropriate position consistently.
- Materials handling equipment is maintained and downtime is minimal.
- Chip pile profile for safe operation is continually maintained.
- · OH&S and safe work practices are used.
- Selects and distributes chips to appropriate position.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPRES9A: Troubleshoot and Rectify Resource Handling Systems

ELEMENTS	PERFORMANCE CRITERIA				
FPPRES9A.1 Identify and diagnose causes of systems and quality faults.	<ul> <li>Operational warning devices are interpreted to determine and fault type and location.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Causes and sources of problems are identified and located and relevant personnel notified.</li> <li>Relevant sources of historical data are accessed/referred to, to confirm diagnosis.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>				
FPPRES9A.2 Rectify systems/machinery and ancillary equipment faults.	<ul> <li>Emergency stop/shutdown, isolation and lockout procedures are initiated prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated, repaired or replaced.</li> <li>Corrective adjustments and maintenance requirements to machinery/systems operation are made.</li> <li>Restoration of machine/system to normal operation is verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>				
FPPRES9A.3 Rectify quality faults.	<ul> <li>Quality faults/variations are identified by observation, systematic sampling and testing.</li> <li>Samples for a range of tests are taken according to established enterprise procedures.</li> <li>Test results are interpreted and operations are adjusted to correct deviations from specification.</li> <li>Out of specification production is dealt with according to SOPs.</li> <li>Recommendations for adjustments to system/process are communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>				
FPPRES9A.4 Record and report system performance and product quality data.	<ul> <li>Variations from specifications are recorded as required.</li> <li>Stock production and machine operation faults are recorded.</li> <li>Causes of variations and corrective actions undertaken are recorded as required.</li> <li>Relevant information is communicated to appropriate personnel.</li> </ul>				

- Explains types, causes and effects of plant shutdowns.
- Implements start-up/shutdown procedures.
- Describes purpose and effects of process variables on production/quality.
- Uses routine checking procedures during plant/systems operation.
- Uses troubleshooting guides and diagnostic procedures.
- Gathers data for analysis and interpretation.
- Conducts routine checks during plant/systems operation.
- Explains types and purposes of tests.
- · Sets up and operates test equipment.
- Implements sampling and testing procedures.
- Interprets test results.
- Describes plant operation and control mechanisms.
- · Logs and records requirements/procedures.
- · Uses keyboarding and computer access skills.
- · Communicates effectively with others.
- Demonstrates ability to comply with environmental requirements.
- · Responds effectively to problems.
- Identifies and rectifies operational and quality variables.
- Demonstrates ability to maintain plant operation
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **PULPING OPERATIONS**

UNITS		
FPPPUL1A	Prepare pulping systems for operation.	
FPPPUL2A	Co-ordinate and implement pulping start-up operation.	
FPPPUL3A	Monitor and control pulping operations.	
FPPPUL4A	Troubleshoot and rectify pulping systems.	
FPPPUL5A	Co-ordinate and implement pulping plant shutdowns.	
FPPPUL6A	Store and distribute pulped product.	

#### PLEASE NOTE:

A single Range Statement has been prepared to cover all Units in Pulping Operations. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

chemical preparation/treatment

· mechanical pulping systems

stock distribution and storage

### **RANGE STATEMENT**

The competencies described for Pulping Operations are consistent with those required when working within the following pulping processes - chemical, mechanical and semi-chemical pulping:

- bleaching plant operations
- cleaning/washing systems
- pulp lapping production
- digester operations

The products of these processes include:

- bleached/unbleached pulp
- baled/rolled/sheet pulp

crumbed pulp

chip preparation

- slushed pulp
- Materials/supplies: . [excludes Unit FPPPUL6A]
- woodchips
- pulp
- chemicals

- steam
- water
- power

### **Equipment:**

- power/steam systems
- hydraulic/electrical systems
- chemical delivery and processing
- conveyors and pump distribution equipment
- pneumatic systems
- process plant
- · materials handling equipment
- · hand and power tools

### Legislation, policy and procedures:

- OH&S policies and procedures
- hazardous chemical handling
- · air and gas discharges
- · relevant endorsed licences

- environmental legislation/requirements
- Standard Operating Procedures (SOP)
- quality assurance requirements
- safety instructions

### **Documentation/procedures/reports:**

- work instructions/purchase orders
- log sheets and shift reports
- · work orders
- exception documents
- delivery/distribution documentation
- · tally/production records
- Standard Operating Procedures (SOP)
- incident reports
- Materials Safety Data Sheets (MSDS)
- process and instrumentation diagrams

#### Maintenance:

- · as per site agreement
- operator maintenance schedules
- · maintenance systems

test equipment is calibrated as per site agreement

#### Sampling and testing: [excludes Unit FPPPUL1A]

Testing as required by production processes and quality guidelines may include the following range:

- consistency
- oven-dried chips
- freeness
- moisture control
- chemical strengths
- loading/storage configurations

- steam pressures
- shives
- steam recovery
- pH tests
- fibre fractions
- physical properties

Testing may be conducted at:

- pre process
- · in process

· end of process

#### Technology:

computer data entry, retrieval & interpretation
 analogue control systems

### Communication channels:

- internal/external
- customers/suppliers
- team members

- Production/services or-ordinator
- maintenance services

# Unit FPPPUL1A: Prepare Pulping Systems for Operation

ELEMENTS	PERFORMANCE CRITERIA
FPPPUL2A.1 Interpret and determine production requirements.	<ul> <li>Grade type and flow rate for production is established and communicated to relevant personnel.</li> <li>Availability of supplies to meet production requirements are determined and delivery systems are set for operation.</li> <li>Readiness and availability of facilities to receive process product and/or by-products is confirmed.</li> </ul>
FPPPUL2A.2 Inspect systems and process functions.	<ul> <li>Isolations (if any) are removed in accordance with Standard Operating Procedures.</li> <li>Pre start-up checks are completed.</li> <li>Power and resource supplies are confirmed as available and ready for production.</li> <li>All relevant systems are activated to ensure they are operational.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL2A.3 Confirm production ready status.	<ul> <li>External supplies receival co-ordinated and confirmed production ready.</li> <li>Operational maintenance requirements are undertaken in accordance with SOP.</li> <li>Operational settings are made and confirmed with specification requirements.</li> <li>Monitoring devices/systems are checked and confirmed operational.</li> <li>Production ready status is confirmed with relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL2A.4 Implement area housekeeping and cleaning.	<ul> <li>Routine checks and maintenance of work area are undertaken.</li> <li>Chemicals/hazardous materials are disposed in accordance with SOPs.</li> <li>Potential waste hazards are removed to designated areas in compliance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets relevant verbal and written information.
- Explains relevant systems, processes, and functions.
- Describes the process adjustment procedures.
- Explains causes and effects of system faults and rectification requirements.
- Identifies and implements operational procedures
- Explains the use and handling requirements of chemicals; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- · Communicates effectively with relevant personnel.
- Demonstrates ability to prepare pulping system for operation.
- Demonstrates ability to inspect and maintain equipment systems and specifications.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPPUL2A: Co-ordinate and Implement Pulping Start-Up Operation

ELEMENTS	PERFORMANCE CRITERIA
FPPPUL2A.1 Synchronise start-up operations.	<ul> <li>Process flow-through systems are started and confirmed.</li> <li>Equipment functions are co-ordinated and monitored for production.</li> <li>Co-ordinated system functions are confirmed by monitoring devices.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPPUL2A.2 Confirm system is operating.	<ul> <li>System operations are visually confirmed as operating.</li> <li>Equipment operation to specifications is confirmed.</li> <li>Process operation is communicated to relevant personnel.</li> <li>Production start-up details are logged, recorded or filed as required.</li> <li>Systems are monitored and adjusted to rectify variations from specifications.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL2A.3 Stabilise process and quality requirements.	<ul> <li>Samples, tests and readings are taken to confirm process requirements will be met.</li> <li>Final adjustments are made to system.</li> <li>Product tests are verified as within specification, where applicable</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets relevant verbal and written information.
- Explains relevant systems, processes, and functions.
- · Describes the process adjustment procedures.
- Explains causes and effects of system faults and rectification requirements.
- · Identifies and implements operational procedures
- Explains the use and handling requirements of chemicals; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- · Communicates effectively with relevant personnel.
- Demonstrates that plant is regularly prepared to production ready status within time requirements.
- Demonstrates that plant is started up and stabilised as specified according to SOP.
- Demonstrates that grade specification is consistently established and maintained.
- Demonstrates that problems in set-up are identified and rectified.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPPUL3A: Monitor and Control Pulping Operations

ELEMENTS	PERFORMANCE CRITERIA
FPPPUL3A.1 Monitor processes.	<ul> <li>Supplies and supply systems are monitored to ensure availability and suitability.</li> <li>Sampling and testing is conducted in accordance with Standard Operating Procedures (SOP).</li> <li>Chest levels are monitored and maintained.</li> <li>Production and/or by-product storage is monitored.</li> <li>Internal and external process variables are monitored and maintained to ensure effective operation.</li> <li>Discharges are monitored to meet environmental requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL3A.2 Monitor and maintain plant and equipment.	<ul> <li>Plant and equipment problems are rectified and/or reported.</li> <li>Plant inspections are undertaken to maintain plant performance.</li> <li>Chest levels are monitored and maintained.</li> <li>Test equipment is calibrated and maintained in accordance with SOP and/or ISO.</li> <li>Plant and equipment adjustments are made to maintain production and quality schedules.</li> <li>Production meets customer requirements.</li> <li>Operator level preventative maintenance schedules are carried out according to enterprise procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL3A.3 Record and document plant performance data.	<ul> <li>Process and plant data is interpreted and recorded in operations log or entered into computer system.</li> <li>Problems or variations with systems or product are communicated to relevant personnel.</li> <li>Hazardous conditions are documented and communicated to relevant personnel.</li> <li>Non-conformance is acted on and reported according to SOP.</li> </ul>

- Identifies sources of operational data.
- Interprets relevant verbal and written information.
- Explains relevant systems, processes and functions.
- Identifies and implements in-process test requirements.
- Describes cause and effects of test results and actions.
- Explains impact of inappropriate responses.
- Explains product grade and process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- Identifies and implements operational procedures.
- Explains use and handling requirements of chemicals used; their purpose, effects, hazards and SOP.
- Demonstrates relevant OH&S, environmental, safe work practices and emergency evacuation procedures.
- Uses technology to assist work performance.
- · Communicates effectively with others.
- Demonstrates that relevant tests are conducted in accordance with SOP.
- Demonstrates that available data and test results are consistently interpreted and appropriate actions are selected and initiated.
- Demonstrates that grade specification/quality is consistently maintained.
- Demonstrates that problems in monitoring process are identified and rectified.
- Demonstrates ability to inspect and maintain equipment systems to specifications.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPPUL4A: Troubleshoot and Rectify Pulping Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPPUL4A.1 Identify and diagnose causes of faults.	<ul> <li>Alarms are interpreted to determine fault type and location.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures.</li> <li>Relevant sources of data are accessed/referred to, to assist diagnosis.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPPUL4A.2 Rectify plant and equipment faults.	<ul> <li>Emergency stop/shut down, isolation and lockout procedures are in place prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated, repaired or replaced.</li> <li>Running adjustments and routine maintenance requirements are carried out.</li> <li>Plant and equipment are returned to normal operation.</li> <li>Verification is communicated to relevant personnel in compliance with relevant site agreements and work practices.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL4A.3 Rectify product quality faults.	<ul> <li>Quality faults/variations are identified by observation, systematic sampling and testing.</li> <li>Samples for a range of tests are taken according to SOP.</li> <li>Test results are interpreted and operations adjusted to correct faults.</li> <li>Faults/causes are rectified if appropriate, or recommendations made for further action.</li> <li>Out-of-specification product is managed in accordance with SOP.</li> <li>Tests and test procedures comply with OH&amp;S and environmental requirements, and safe work practices.</li> </ul>
FPPPUL4A.4 Report and record system performance and product quality data.	<ul> <li>Variations from specification of product production and plant and equipment faults are documented/logged.</li> <li>Signs and symptoms of performance variation are entered into log.</li> <li>Assessment and evaluation of causes of deviation, and corrective action undertaken is recorded as required.</li> <li>Relevant information is communicated to appropriate personnel.</li> </ul>

- Identifies sources of historical and operational data.
- Interprets relevant verbal and written information.
- Explains relevant systems, processes and functions.
- Identifies and implements in-process test requirements.
- Describes cause and effects of test results and actions.
- Explains impact of inappropriate responses.
- Explains product grade and process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- Identifies and implements operational procedures.
- Explains use and handling requirements of chemicals used; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- Communicates effectively with relevant personnel.
- Demonstrates that emergencies/crash shutdowns are dealt with in accordance with SOP.
- Demonstrates that Isolations and lockouts are conducted according to SOP.
- Demonstrates that relevant tests are conducted in accordance with SOP.
- Demonstrates that available data and test results are consistently interpreted and appropriate actions are selected and initiated.
- Demonstrates that grade specification/quality is consistently maintained or appropriate action taken.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPPUL5A: Co-ordinate and Implement Pulping Plant Shutdowns

ELEMENTS	PERFORMANCE CRITERIA
FPPPUL5A.1 Conduct a planned shutdown.	<ul> <li>Shutdown is planned according to requirements and other relevant departments/personnel are notified.</li> <li>Shutdown instructions and requirements are interpreted.</li> <li>Work plan is communicated with relevant personnel.</li> <li>Shutdown procedures are co-ordinated in accordance with Standard Operating Procedures.</li> <li>Plant is left in a safe condition for further access.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL5A.2 Manage an uncontrolled shutdown.	<ul> <li>The cause of the shut is identified.</li> <li>Safety of personnel is secured and confirmed according to SOP.</li> <li>Shutdown of appropriate sections/equipment is completed in accordance with SOP requirements.</li> <li>Plant is left in a safe condition for access.</li> <li>Shutdown status is communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Identifies faults and causes of shutdowns.
- Interprets relevant verbal and written information.
- Explains relevant systems, processes and functions.
- · Explains impact of inappropriate responses.
- Describes causes and effects of system faults and rectification requirements.
- · Identifies and implements operational procedures.
- Demonstrates relevant OH&S, environmental, safe work practices and emergency evacuation procedures.
- Uses technology to assist work performance.
- · Communicates effectively with others.
- Describes planned shutdown procedures and ensures safety of personnel.

# **WORKPLACE ASSESSMENT**

#### Criteria:

- Demonstrates that emergencies/crash shutdowns are dealt with in accordance with SOP.
- Demonstrates that isolations and lockouts are conducted according to SOP.
- Demonstrates that relevant tests are conducted in accordance with SOP.
- Leaves plant in safe condition for further access.
- Demonstrates ability to shutdown the plant.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPPUL6A: Store and Distribute Pulped Product

ELEMENTS	PERFORMANCE CRITERIA
FPPPUL6A.1 Prepare for handling operation.	<ul> <li>Handling requirements are interpreted and confirmed from instructions and Standard Operating Procedures.</li> <li>Work areas are cleaned and prepared for operation.</li> <li>Pre-operation checks are conducted on relevant equipment in accordance with SOP.</li> <li>Availability of required materials for the task is confirmed.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPUL6A.2 Load/unload product.	<ul> <li>Product is directly loaded from production line in compliance with materials handling requirements and SOP.</li> <li>Non-conformance product is identified and/or separated according to SOP.</li> <li>Loads are within safety limits and comply with relevant requirements.</li> <li>Product is distributed to appropriate storage.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL6A.3 Transport and store product.	<ul> <li>Product is conveyed in compliance with established procedures and regulations.</li> <li>Product is stored in approved configurations and in relevant stock locations.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPPUL6A.4 Record and document product data.	<ul> <li>Inventory records are compiled and verified.</li> <li>Product is appropriately identified as required in accordance with SOP.</li> </ul>

- · Explains storage and inventory systems.
- Operates manual/materials handling equipment.
- Conducts routine maintenance of equipment.
- Interprets documentation.
- · Identifies internal/external suppliers.
- Explains traffic flows and work area conditions.
- Demonstrates that product is successfully stored in appropriate locations
- Demonstrates that non-conformance loads are identified and acted upon.
- Demonstrates that product is handled to minimise damage.
- Demonstrates that inventory records are maintained as required.
- Work is carried out in compliance with relevant OH&S, SOP and safe work practices.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# **CHEMICAL RECOVERY OPERATIONS**

UNITS	
FPPREC1A	Prepare chemical recovery systems for operation.
FPPREC2A	Initiate and stabilise system start-up operation.
FPPREC3A	Monitor and optimise chemical recovery operations.
FPPREC4A	Troubleshoot and rectify chemical recovery systems.
FPPREC5A	Manage chemical recovery plant shutdowns.
FPPREC6A	Store and distribute processed chemicals.

# PLEASE NOTE:

A single Range Statement has been prepared to cover all Units in Chemical Recovery Operations. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### **RANGE STATEMENT**

The competencies described in this group of units are consistent with those required when working within the following chemical recovery processes:

- evaporator operationslime mud treatment
- condensate stripper
- black liquor oxidation
- WAO (wet air oxidation)
- causticising plant operations
- recovery boiler operations
- DARS operations
- foul gas and condensate incineration

The chemicals involved within these processes include:

- white liquor
- black liquor
- green liquor
- condensates

non condensable gases

The type of plant and systems shutdowns likely to occur within the chemical recovery processes may include the following: [excludes Units FPPREC1A, FPPREC6A]

- planned/operational shut
- crash shut
- emergency shut
- · maintenance shut

### Materials/supplies: [excludes Unit FPPREC6A]

steam

- water
- chemicals
- power

#### Equipment: [excludes Units FPPREC1A, FPPREC2A]

- power/steam generation
   process plant
- mechanical/hydraulic/ electrical systems

pneumatic systems

equipment

- hydraulic/electrical systems
- water supply systems and pumps and transfer equipment

## Legislation, policy and procedures:

- OH&S policies and procedures
- enterprise SOP
- environmental legislation and requirements
   hazardous chemical handling
- quality management policies

#### Documentation/procedures/reports:

- work instructions/orders
- incident reports
- Standard Operating Procedures (SOP)
- log sheets and shift reports
- · emergency operational procedures (EMOs)
- process and instrument diagrams
- · non conformance reports

#### Maintenance:

- as per site agreement
- operator maintenance schedules
- maintenance systems

### Sampling/testing/monitoring: [excludes Units FPPREC5A, FPPREC6A]

Testing/monitoring as required by chemical recovery processes and quality guidelines may include:

- process flows
- steam pressures
- chemical strengths

- process temperatures process pressures
- pH tests
- chemical density
- Testing/monitoring of chemicals may be undertaken within the following stages of the recovery process:
- pre process
- end of process
- in process

# Storage and distribution of processed chemicals will involve continuous monitoring

- storage capacities
- distribution serviceability
- product quality

#### **Technology:**

- computer data entry and retrieval
- process monitoring and management equipment

#### Communication channels:

- team members
- maintenance services
- production/services co-ordinator

- internal/external customers/suppliers

# Unit FPPREC1A: Prepare Chemical Recovery Systems for Operation

ELEMENTS	PERFORMANCE CRITERIA
FPPREC1A.1 Interpret and determine production requirements.	<ul> <li>Processing rates for production is established and communicated to relevant personnel.</li> <li>Availability of incoming supplies to meet production requirements are determined.</li> <li>Readiness and availability of facilities to receive process product and by-products is confirmed.</li> </ul>
FPPREC1A.2 Inspect systems and process functions.	<ul> <li>Isolations are removed in accordance with Standard Operating Procedures.</li> <li>Pre start-up checks are completed.</li> <li>Power and resource supplies are confirmed as available and ready for production.</li> <li>All relevant systems are activated to ensure they are operational.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC1A.3 Confirm production ready status.	<ul> <li>External supplies receival co-ordinated and confirmed production ready.</li> <li>Operational settings are made and confirmed with specification requirements.</li> <li>Monitoring devices/systems are checked and confirmed operational.</li> <li>Production ready status is confirmed with relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC1A.4 Implement area housekeeping and cleaning.	<ul> <li>Identification and reporting of potential hazards according to SOP.</li> <li>Routine checks and maintenance of work area are undertaken.</li> <li>Waste materials are disposed of and potential hazards reported/removed.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets relevant verbal and written information.
- Explains chemical recovery systems, processes, and functions.
- Describes the process adjustment procedures.
- Explains causes and effects of system faults and rectification requirements.
- Implements operational procedures (SOP)
- Explains the use and handling requirements of chemicals; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- Communicates effectively with relevant personnel.
- · Implements isolation procedures.
- Demonstrates that plant is regularly prepared to production ready status within time requirements.
- Demonstrates that problems in system preparation are identified and rectified.
- Demonstrates the ability to inspect and maintain equipment/systems to specification.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPREC2A: Initiate and Stabilise System Start-Up Operation

ELEMENTS	PERFORMANCE CRITERIA
FPPREC2A.1 Synchronise start-up operations.	<ul> <li>Process flow-through systems are started and confirmed.</li> <li>Equipment functions are co-ordinated and monitored for production.</li> <li>Co-ordinated system functions are confirmed by monitoring devices.</li> <li>System operations are visually confirmed as operating.</li> <li>Equipment start-up sequence is logged, recorded or filed as required.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPREC2A.2 Confirm system is operating.	<ul> <li>Product tests are verified as within specification, where applicable.</li> <li>Equipment operation to specifications is confirmed.</li> <li>Process operation is communicated to relevant personnel.</li> <li>Production start is logged, recorded or filed as required.</li> <li>Systems are monitored and adjusted to achieve specifications.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC2A.3 Stabilise process and quality requirements.	<ul> <li>Samples, tests and readings are taken and logged to confirm process requirements will be met.</li> <li>Final adjustments are made to system.</li> <li>Work complies with OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets relevant verbal and written information.
- Explains chemical recovery systems, processes, and functions.
- Explains start-up procedures for recovery systems operation.
- · Describes the process adjustment procedures.
- Lists factors affecting optimal performance of the recovery process operation.
- Explains causes and effects of system faults and rectification requirements.
- Explains the use and handling requirements of chemicals; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- Communicates effectively with relevant personnel.
- Demonstrates that plant is regularly prepared to production ready status within time requirements.
- Demonstrates that plant is started up, stabilised and optimised as specified according to SOP.
- Demonstrates that process quality is consistently established and maintained.
- Demonstrates that problems in set-up are identified and rectified.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPREC3A: Monitor and Optimise Chemical Recovery Operations

ELEMENTS	PERFORMANCE CRITERIA
FPPREC3A.1 Monitor processes and equipment operation.	<ul> <li>Supplies and supply systems are monitored to ensure availability and suitability.</li> <li>Sampling and testing is conducted in accordance with Standard Operating Procedures.</li> <li>Production and by-product storage is monitored.</li> <li>Internal and external process variables are monitored and compared to ensure effective operation and optimised production.</li> <li>Operator level preventative maintenance schedules are carried out to enterprise requirements.</li> <li>Discharges are monitored and compared against environmental requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC3A.2 Optimise processes and equipment operations.	<ul> <li>Process and equipment problems are rectified and/or reported.</li> <li>Plant inspections are undertaken to optimise plant performance.</li> <li>Test equipment is calibrated and maintained in accordance with SOP.</li> <li>Processes and equipment adjustments are made to optimise production and quality schedules.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC3A.3 Record and document performance data.	<ul> <li>Process and plant data is interpreted and recorded in operations log or entered into computer system.</li> <li>Problems or variations with systems or product are communicated to relevant personnel.</li> <li>Hazardous conditions are documented and communicated to relevant personnel.</li> <li>Non-conformance is acted on and reported according to SOP.</li> </ul>

- Identifies sources of operational data.
- Interprets relevant verbal and written information.
- Explains systems, processes and functions.
- Implements in-process test requirements.
- Describes cause and effects of test results and actions.
- Explains impact of inappropriate responses to plant variables.
- Explains chemical recovery and process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- Explains use and handling requirements of chemicals used; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- Communicates effectively with relevant personnel.
- Demonstrates that relevant tests are conducted in accordance with SOP.
- Demonstrates that available data and test results are consistently interpreted and appropriate actions are selected and initiated.
- Demonstrates that process quality is consistently maintained.
- Demonstrates that problems in process are identified and rectified as soon as practicable.
- Demonstrates that plant operation/production is optimised within existing range of variables.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPREC4A: Troubleshoot and Rectify Chemical Recovery Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPREC4A.1 Identify and diagnose causes of faults.	<ul> <li>Warning devices are interpreted to determine fault type and location.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures.</li> <li>Relevant sources of data are accessed/referred to, to assist diagnosis.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPREC4A.2 Rectify plant and equipment faults.	<ul> <li>Emergency stop/shut down, isolation and lockout procedures are in place prior to fault rectification.</li> <li>Hazardous conditions are identified and communicated to relevant personnel</li> <li>Faulty equipment/instrumentation is isolated, repaired or replaced.</li> <li>Running adjustments and routine maintenance requirements are carried out.</li> <li>Plant and equipment are returned to normal operation.</li> <li>Verification is communicated to relevant personnel in compliance with relevant site agreements and work practices.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC4A.3 Rectify product quality faults.	<ul> <li>Quality faults/variations are identified by observation, systematic sampling and testing.</li> <li>Samples for a range of tests are taken according to SOP.</li> <li>Test results are interpreted and operations adjusted to correct faults.</li> <li>Faults/causes are rectified if appropriate, or recommendations made for further action.</li> <li>Out-of-specification product is managed in accordance with SOP.</li> <li>Tests and test procedures comply with OH&amp;S and environmental requirements, and safe work practices.</li> </ul>
FPPREC4A.4 Report and record system performance and product quality data.	<ul> <li>Variations from specification of product production and plant and equipment faults are documented/logged.</li> <li>Indications of performance variance are entered into log.</li> <li>Assessment and evaluation of causes of deviation, and corrective action undertaken is recorded as required.</li> <li>Details of hazardous conditions or situations are documented in accordance with statutory requirements and SOP.</li> <li>Relevant information is communicated to appropriate personnel.</li> </ul>

- Identifies sources of operational data.
- Interprets relevant verbal and written information.
- Explains systems, processes and functions.
- Implements in-process test requirements.
- Describes cause and effects of actions.
- · Explains impact of inappropriate responses.
- · Explains process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- Explains use and handling requirements of chemicals used; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- Communicates effectively with relevant personnel.
- Demonstrates that emergencies/crash shutdowns are dealt with in accordance with SOP.
- Demonstrates that isolations and lockouts are conducted according to SOP.
- Demonstrates that relevant tests are conducted in accordance with SOP.
- Demonstrates that available data and test results are consistently interpreted and appropriate actions are selected and initiated.
- Demonstrates that quality is consistently maintained.
- Demonstrates that faults are rectified within site agreements.
- Demonstrates that plant operation/production has minimal interruptions.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPREC5A: Manage Chemical Recovery Plant Shutdowns

ELEMENTS	PERFORMANCE CRITERIA
FPPREC5A.1 Conduct a planned shutdown.	<ul> <li>Shutdown is planned according to requirements.</li> <li>Shutdown instructions and requirements are interpreted.</li> <li>Work plan is communicated with relevant personnel.</li> <li>Shutdown procedures are co-ordinated in accordance with Standard Operating Procedures.</li> <li>Plant is left in a safe condition for further access.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC5A.2 Handle an uncontrolled shutdown.	<ul> <li>The cause of the shut is identified.</li> <li>Safety of personnel is secured and confirmed according to SOP.</li> <li>Shutdown of appropriate sections/equipment is completed in accordance with SOP requirements.</li> <li>Plant is left in a safe condition for access.</li> <li>Shutdown status is communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Identifies sources of operational data.
- Interprets relevant verbal and written information.
- Explains systems, processes and functions.
- Implements in-process test requirements.
- Describes cause and effects of test results and actions.
- · Explains impact of inappropriate responses.
- Explains product grade and process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- Explains use and handling requirements of chemicals used; their purpose, effects, emergency procedures, hazards and SOP.
- Uses technology to assist work performance.
- Communicates effectively with relevant personnel.
- Demonstrates that shutdowns are in accordance with SOP.
- Demonstrates that isolations and lockouts are conducted according to SOP.
- Demonstrates that relevant tests are conducted in accordance with SOP.
- Demonstrates that available data and test results are consistently interpreted and appropriate actions are selected and initiated.
- Demonstrates that grade specification/quality is consistently maintained.
- Demonstrates that faults are rectified within site agreements.
- Demonstrates that plant operation/production has minimal interruptions.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPREC6A: Store and Distribute Processed Chemicals

ELEMENTS	PERFORMANCE CRITERIA
FPPREC6A.1 Prepare for handling operation.	<ul> <li>Handling requirements are interpreted and confirmed from instructions and Standard Operating Procedures.</li> <li>Work areas are cleaned and prepared for operation.</li> <li>Pre-operation checks are conducted on mechanical equipment in accordance with SOP.</li> <li>Availability of required materials for the task is confirmed.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC6A.2 Receive and distribute product.	<ul> <li>Product is received from processing plant in compliance with materials handling requirements and SOP.</li> <li>Non-conformance product is identified and/or separated according to SOP.</li> <li>Flows are within safety limits and comply with relevant requirements.</li> <li>Product is distributed to appropriate storage.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC6A.3 Transport and store product.	<ul> <li>Product is conveyed in compliance with established procedures and regulations.</li> <li>Product is stored to appropriate levels in relevant storage vessels.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPREC6A.4 Record and document product data.	<ul> <li>Inventory records are compiled and verified.</li> <li>Product is appropriately identified as required in accordance with SOP.</li> <li>Product information is communicated to relevant sections/personnel.</li> </ul>

- Explains transfer, storage and distribution systems.
- Operates chemical distribution plant and equipment.
- Operates manual/materials handling equipment.
- Conducts routine maintenance of distribution plant and equipment.
- Interprets documentation.
- · Identifies internal/external suppliers.
- Explains work area conditions and requirements.
- Demonstrates that product is successfully supplied to appropriate storage's.
- Demonstrates that non-conformance materials are identified and acted upon.
- Demonstrates that product is handled to minimise damage.
- Demonstrates that inventory records are maintained as required.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# HANDLING AND PREPARING WASTE PAPER FOR PULP PRODUCTION

UNITS	
FPPHWP1A	Receive waste paper.
FPPHWP2A	Unload waste paper.
FPPHWP3A	Set up and operate sorting/pressing line.
FPPHWP4A	Manage system shutdowns.
FPPHWP5A	Conduct paper grade quality assessments.
FPPHWP6A	Store and despatch blocks.

## **PLEASE NOTE:**

A single Range Statement has been prepared to cover all Units in Handling and Preparing Waste Paper for Pulp Production. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### **RANGE STATEMENT**

The competencies for this group of units relate to those systems and functions involved in handling and preparing waste paper for pulp production.

It may involve the following shutdown situations: [excludes Units FPPHWP1A-FPPHWP3A, FPPHWP5A, FPPHWP6A]

- controlled/planned shutdown for equipment change, regular maintenance or end of shift
- emergency or uncontrolled shutdown.

#### Materials/supplies: [excludes Units FPPHWP4A-FPPHWP6A]

- · Raw materials delivered may be waste paper, chemicals, fuels and gas.
- Blocks, pallets, shippers, signs, labels and strapping.

#### **Equipment:** [excludes Unit FPPHWP5A]

- Conveyor systems, cranes, sorting tables.
- Fork lift, straddle truck, trailer/tipper, articulated loader, side loader, mobile crane.
- Hydraulic presses/blocking machinery, manual handling equipment.
- Mechanical handling equipment (manual and motorised).
- Accessories may include protective and high visibility safety clothing and equipment, break down tools and equipment, electronic communication equipment.
- Hand and power tools

## Attachments: [excludes Unit FPPHWP5A]

• Fork lift tines, crane hooks, chains, slings and straps, grabs.

#### Legislation, policy and procedures:

- OH&S policies and procedures, and other statutory requirements (state and commonwealth); requirements include vehicle loading/unloading safety requirements, mechanical handling and safe working practices.
- Internal and external environmental requirements.
- Dangerous goods and services.
- Standard Operating Procedures (SOP).
- New plant legislation.
- Relevant operator licences and endorsements.

### Documentation/procedures/reports:

- · Sampling and test reports.
- Weighbridge dockets, work orders, tally sheets, truck delivery dockets, invoices, SOP, non-conformance reports, test results/reports.
- Log sheets (production/equipment), equipment performance data, tonnage/input/ conversion.
- Stock inventory, work orders, despatch documentation, quality assurance documentation, customer orders.
- Process and instrument diagrams.

#### Maintenance:

· As per site agreement.

- Maintenance systems.
- Operator maintenance schedules.

#### Sampling/testing: [excludes Unit FPPHWP1A]

- Visual assessments and sampling at process by operator, to site specifications.
- Visual assessment of loads and finished products, storage profiles, load configuration.
- Visual assessment of product for contamination including:
  - unacceptable inks or dyes
  - infestation or rot in paper
  - steel
  - rocks
  - paint
  - plastic
  - any other non-recyclables

# **RANGE STATEMENT Cont.**

## Technology:

- Computer data entry and retrieval.
- Electronic weighbridge.
- Sampling and testing equipment.

## **Communication channels:**

- Internal/external suppliers and customers.
- maintenance services.
- team members
- production/services co-ordinators.

# **Unit FPPHWP1A: Receive Waste Paper**

ELEMENTS	PERFORMANCE CRITERIA
FPPHWP1A.1 Check, weigh and record load data.	<ul> <li>Trucks delivering loads are identified, documents checked, and load accepted.</li> <li>Load data, estimated weights or volumes are calculated and recorded.</li> <li>Non-conforming loads are handled in accordance with Standard Operating Procedures.</li> <li>Confirmation of delivery record is obtained from truck driver.</li> </ul>
FPPHWP1A.2 Direct trucks for unloading.	<ul> <li>Trucks are directed to appropriate unloading area according to load grade.</li> <li>Yard personnel as required, are notified of deliveries requiring unloading.</li> <li>Truck movements in the yard are monitored.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains paper types, specifications, characteristics and grade specifications.
- Enters data and uses recording systems.
- · Calculates weights and tables.
- Operates materials handling equipment and procedures.
- · Explains plant and yard layout.
- · Interprets data.
- Demonstrates the ability to sort/grade waste paper to specification.
- Demonstrates the ability to establish and maintain a safe work environment and complies with all SOP and OH&S requirements.
- Demonstrates the ability to direct trucks to appropriate locations for unloading.
- Demonstrates the ability to calculate and document accurately in accordance with enterprise requirements.
- Demonstrates the ability to communicate effectively with relevant personnel.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPHWP3A: Unload Waste Paper

ELEMENTS	PERFORMANCE CRITERIA
FPPHWP3A.1 Receive and unload waste paper.	<ul> <li>Load/product documentation is received, interpreted and verified.</li> <li>Load and handling characteristics are identified in accordance with Standard Operating Procedures.</li> <li>Mechanical handling equipment is selected in accordance with load and handling characteristics and in compliance with SOP.</li> <li>Mechanical handling equipment is operated in accordance with enterprise SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPHWP3A.2 Grade/class, sort and stack waste paper.	<ul> <li>Waste paper is graded and assessed for immediate processing, or for storage.</li> <li>Waste paper is moved to appropriate stacking locations consistent with type, quality and stock rotation requirements.</li> <li>Stacks are constructed to provide stability and minimise problems.</li> <li>Provision for decks, storage bays and access for lifting equipment is made when storing.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPHWP3A.3 Store product.	<ul> <li>Load is lifted, carried and set down safely in accordance with SOP.</li> <li>Load is stored in compliance with enterprise stock location requirements.</li> <li>Inventory records documentation is completed in accordance with enterprise requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Explains load types, specifications and characteristics.
- · Enters data and uses recording systems.
- Explains stocking procedures/implications/requirements.
- Operates materials handling equipment and procedures.
- · Explains deck/storage bay requirements.
- Explains enterprise emergency and evacuation procedures.
- Describes dangerous goods handling and storing requirements.
- · Interprets data.
- Stacks and stores raw materials as required.
- Communicates with area personnel.
- Selects appropriate actions for handling non-conformance loads.
- Demonstrates a knowledge of yard layout and unloading areas.
- · Plans, moves and stacks paper efficiently.
- Minimises handling to meet loading, processing, and stock rotation requirements.
- Delivers paper as required, to meet production requirements.
- · Maintains machinery and load receipt documentation effectively.
- Uses approved manual handling techniques and complies with all SOP.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPHWP3A: Set Up and Operate Sorting/ Pressing Line

ELEMENTS	PERFORMANCE CRITERIA
FPPHWP3A.1 Interpret production requirements.	<ul> <li>Production requirements/specifications are identified from mill documentation.</li> <li>Paper supply requirements are established with depot personnel, if appropriate.</li> </ul>
FPPHWP3A.2 Start up system.	<ul> <li>External inspection and pre-operational checks of the conveyor system are carried out.</li> <li>Isolations are removed in accordance with Standard Operating Procedures.</li> <li>Monitoring devices and alarm systems are confirmed as operational.</li> <li>Operator level preventative maintenance schedules are carried out according to enterprise procedures.</li> <li>Relevant personnel are notified of impending start up.</li> <li>System is started in accordance with Standard Operating Procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPHWP3A.3 Implement area housekeeping requirements.	<ul> <li>Potential hazards and obstructions are identified and cleared from production area.</li> <li>Infeed area is regularly cleared of debris.</li> <li>Cleaning routines and schedules are met and comply with worksafe practices and OH&amp;S requirements.</li> </ul>
FPPHWP3A.4 Monitor and maintain grade separation.	<ul> <li>Supply of waste paper is co-ordinated and maintained to ensure production requirements are met.</li> <li>Conveyors are monitored to provide optimum flow.</li> <li>Grades are removed and/or directed for further processing.</li> <li>Contaminants are identified and removed.</li> <li>Production and quality records are maintained.</li> </ul>
FPPHWP3A.5 Troubleshoot and resolve problems with line operations.	<ul> <li>Equipment problems are identified and rectified.</li> <li>Equipment faults and/or maintenance requirements are reported to appropriate personnel.</li> <li>Isolation or lock-out procedures are followed before correcting machinery or flow problems.</li> </ul>
FPPHWP3A.6  Record/docum ent machine performance and production data.	<ul> <li>Machine and system performance log book is maintained as required.</li> <li>Data is entered into computer system.</li> <li>Problems or variations are communicated to relevant personnel.</li> </ul>

- Interprets documentation and recording requirements.
- Explains system set up procedures.
- · Operates equipment.
- Explains confined space requirements.
- · Implements isolation and lockout procedures.
- Explains risks and hazards requirements.
- · Explains equipment fault rectification procedures.
- · Describes effects of operational equipment faults.
- Identifies range of contaminants/outthrows.
- Explains quality standards and grading classifications.
- Describes causes and effects of operational equipment faults and takes appropriate rectification action.
- Identifies and rectifies problems associated with the broad range sorting and pressing operations are effectively identified and rectified.
- Identifies and removes contaminants.
- · Demonstrates ability to maintain schedule.
- Demonstrates ability to grade paper within specification.
- Starts up and operates sorting/pressing line.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# **Unit FPPHWP4A: Manage System Shutdowns**

ELEMENTS	PERFORMANCE CRITERIA
FPPHWP4A.1 Manage a planned shutdown.	<ul> <li>Shutdown procedures are co-ordinated in accordance with Standard Operating Procedures.</li> <li>Plant is left in a safe condition for access.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPHWP4A.2 Handle an uncontrolled shutdown.	<ul> <li>Cause of shutdown is identified and isolated according to SOP.</li> <li>Safety of personnel is secured and confirmed in accordance with SOP.</li> <li>Shutdown of system or appropriate sections/plant is completed in accordance with SOP and relevant personnel are notified.</li> <li>Plant is left in a safe condition for access.</li> </ul>

- Explains emergency procedures and responses.
- Explains plant and machinery functions and operation.
- Co-ordinates and plans shutdown activity.
- Communicates clearly with relevant personnel.
- Demonstrates ability to shut down operations.
- Identifies and rectifies problems associated with the operations.
- Complies with OH&S requirements.
- Demonstrates ability to maintain waste system.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPHWP5A: Conduct Paper Grade Quality Assessments

ELEMENTS	PERFORMANCE CRITERIA		
FPPHWP5A.1 Conduct routine visual assessments of blocks.	<ul> <li>Blocks are visually assessed against specification requirements.</li> <li>Potential problems with grade characteristics and contamination are identified and reported.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>		
FPPHWP5A.2 Conduct grade/paper quality tests.	<ul> <li>Grade specification requirements are identified from production schedules and orders.</li> <li>Paper is tested for compliance with specifications.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>		
FPPHWP5A.3 Report and follow up test results.	<ul> <li>Test results are interpreted, recorded/entered, and communicated to relevant personnel.</li> <li>Out-of-specification test results are reported and procedures for rectification are initiated.</li> <li>Test sampling is modified to accommodate production changes.</li> <li>Recommendations are made to relevant personnel for rectification of system processes and operation.</li> </ul>		

- Identifies contaminants and paper grade types.
- · Explains quality standards.
- · Describes visual assessment practices.
- Describes effects of contaminates on the pulping processes and customer finished product.
- Prepares reports and makes recommendations.
- Identifies and removes contaminants.
- Safely collects samples.
- Assesses waste quality and employs appropriate handling processes and procedures.
- Interprets observations against specifications and initiates corrective action.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# **Unit FPPHWP6A: Store and Despatch Blocks**

ELEMENTS	PERFORMANCE CRITERIA
FPPHWP6A.1 Pack/store product.	<ul> <li>Packaging requirements are interpreted from customer orders.</li> <li>Package identification/verification procedures are undertaken in accordance with Standard Operating Procedures.</li> <li>Goods are matched to and with correct labels, tags and stickers in accordance with enterprise requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPHWP6A.2 Despatch product.	<ul> <li>Customer order and specifications are interpreted.</li> <li>Goods are retrieved from storage area in compliance with SOP.</li> <li>Goods are loaded, despatched and documented according to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains warehouse organisation and workflow.
- Operates materials handling equipment.
- · Maintains materials handling equipment.
- Interprets customer order requirements.
- Selects product.
- · Packs/wraps product to customer requirements.
- Operates packaging/wrapping/labelling equipment.
- Communicates effectively with individuals/teams.
- · Explains freight carrying and load restraints.
- Maintains inventory systems with accurate information.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# WASTE PAPER OPERATIONS

UNITS		
FPPWPO1A	Prepare waste paper plant for operation.	
FPPWPO2A	Co-ordinate and implement waste paper plant start-up operations.	
FPPWPO3A	Monitor and control waste paper plant operations.	
FPPWPO4A	Troubleshoot and rectify waste paper plant systems.	
FPPWPO5A	Co-ordinate and implement waste paper plant shutdown.	

### **RANGE STATEMENT**

The competencies described in this group of units relate to the use of recycled paper/broke as the primary resource within the following stock production processes:

- conveyor feed systemcleaning systemsdispersion

- water treatment
- de-inking system
- hydrapulper
   refining system
   fractionating systems
   dewatering system
   holding tanks/silos
   flotation system

  - screening processesreject systems

System shutdowns may be caused by: [excludes Unit FPPWPO1A]

- product change
- mechanical failures
- · crash shut
- full storage/low supply storage
- maintenance shut
- process failures

#### Materials/supplies:

- · waste paper
- air
- chemicals

- steam
- water
- electricity

#### **Equipment:**

- · fork trucks and front end loaders
- cranes

#### Legislation, policy and procedures:

- OH&S policies/procedures
- · statutory requirements (state and commonwealth)
- appropriate licences
- environmental policies
- Standard Operating Procedures (SOP)

#### **Documentation/procedures/reports:**

- Standard Operating Procedures (SOP)
- Material Safety Data Sheets (MSDS)
- furnish sheets
- tally sheets
- process and instrument diagrams

#### Maintenance:

- as per site agreement
- operator maintenance schedules
- maintenance systems

## Sampling/testing: [excludes Unit FPPWP01A, FPPWP05A]

- stock consistency
- · stock colour
- stock brightness
- water quality

- waste paper quality
- · visual assessments
- stickies

#### Technology:

- computer data entry/retrieval
- communication equipment/2-way radios

#### **Communication channels:**

- internal/external customers and suppliers
- team members

- · maintenance services
- production/services co-ordinators

# Unit FPPWPO1A: Prepare Waste Paper Plant for Operation

ELEMENTS	PERFORMANCE CRITERIA
FPPWPO1A.1 Interpret the specification sheet to determine production requirements.	<ul> <li>Furnish type, availability, and supply rate is established and communicated to relevant personnel.</li> <li>Chemical requirements are determined and chemical delivery systems set for operation.</li> <li>Water and stock testing requirements are established.</li> <li>Conveyor loading procedure is planned to meet production requirements.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPWPO1A.2 Inspect relevant plant, equipment and furnish.	<ul> <li>Furnish is positioned in the holding area to ensure safe and efficient stock preparation.</li> <li>Process supplies are verified as ready for operation.</li> <li>Pre-start checks are completed on systems according to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWPO1A.3 Implement area housekeeping and cleaning.	<ul> <li>Routine checks and maintenance of work area are undertaken.</li> <li>Housekeeping/cleaning activities are conducted to ensure a safe and clean work area.</li> <li>Potential waste hazards are removed to designated areas, in compliance with SOP.</li> <li>Chemical/hazardous materials are disposed of as required by SOP.</li> <li>Solid waste is disposed according to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Reads and interprets specification sheets and SOP.
- Explains the use, purpose and safe handling techniques for chemicals.
- Identifies furnish types.
- Operates and maintains plant and equipment within site agreement.
- Drives/operates mechanical handling equipment.
- Demonstrates ability to handle solid waste disposal system.
- Demonstrates that plant is consistently and safely set up to run.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPWPO2A: Co-ordinate and Implement Waste Paper Plant Start-Up Operations

ELEMENTS	PERFORMANCE CRITERIA
FPPWPO2A.1 Prepare systems operation for pulp production.	<ul> <li>Plant adjustments are completed on systems according to Standard Operating Procedures.</li> <li>Monitoring devices are checked to confirm operation.</li> <li>Plant operations are confirmed as ready.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWPO2A.2 Implement system start-up.	<ul> <li>Plant systems are started up in accordance with SOP.</li> <li>Adjustments are made to stock flow and systems settings to ensure quality production.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWPO2A.3 Confirm stock quality is within specifications.	<ul> <li>Stock flow sampling and tests are verified as within specification.</li> <li>Isolations are removed according to SOP.</li> <li>Equipment/systems operations to specifications is confirmed.</li> <li>System operation and production data is logged, recorded or filed as required.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets documentation
- Implements plant start-up procedures.
- Explains types and purposes of tests.
- Sets up and operates test equipment.
- Implements sampling and testing procedures.
- Interprets test results.
- Operates and adjusts plant.
- Logs and records information.
- Describes causes and effects of operational equipment faults and takes rectification action.
- Implements confined space procedures.
- Problems associated with pulping operations are identified and rectified.
- Demonstrates that shutdown causes are identified and responded to appropriately.
- Demonstrates that product testing is set-up and conducted in compliance with SOP.
- Demonstrates that stock quality is consistently confirmed as within specification.
- Demonstrates that required production throughput is confirmed and maintained.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPWPO3A: Monitor and Control Waste Paper Plant Operations

ELEMENTS	PERFORMANCE CRITERIA
FPPWPO3A.1 Monitor and maintain plant and ancillary operations.	<ul> <li>Process variables are monitored and maintained to production requirements.</li> <li>Process supplies are maintained to production specifications.</li> <li>Chest levels are monitored and maintained as required.</li> <li>Visual/walk around inspections of plant/systems are conducted.</li> <li>Electronic monitoring of screens and gauges is carried out.</li> <li>Reject systems are monitored and maintained within operating parameters.</li> <li>Operator level preventative maintenance is carried out according to enterprise procedures.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPWPO3A.2 Control stock quality/specifications.	<ul> <li>Conveyor feeds are monitored and maintained for consistent delivery.</li> <li>Stock quality is monitored by sampling and testing to ensure production requirements are maintained.</li> <li>Modifications to pulp quality or systems operations are made to rectify out-of-specification stock.</li> <li>Water distribution systems are monitored and maintained.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWPO3A.3 Implement area housekeeping and cleaning.	<ul> <li>Routine checks and maintenance of work area are undertaken.</li> <li>Housekeeping/cleaning activities are conducted to ensure a safe and clean work area.</li> <li>Potential waste hazards are removed to designated areas, in compliance with SOP.</li> <li>Chemical/hazardous materials are disposed of as required by SOP.</li> <li>Solid waste is disposed according to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWPO3A.4 Record and document plant performance data.	<ul> <li>Systems and production data is interpreted and recorded in operations log book or entered into computer system.</li> <li>Problems or variations with systems or product are communicated to relevant personnel.</li> </ul>

- Explains purpose and operation of reject systems.
- Explains purpose and operation of water systems.
- Describes purpose and effects of process variables on production/quality.
- Conducts routine checks during plant/systems operation.
- Explains types and purposes of tests.
- Sets up and operates test equipment.
- Implements sampling and testing procedures.
- · Interprets test results.
- Describes plant operation and control mechanisms.
- Logs and records requirements/procedures.
- · Communicates effectively with relevant personnel.
- Demonstrates ability to inspect and maintain equipment/systems to specification.
- Demonstrates that plant operation is consistently maintained within specification.
- Demonstrates that stock quality is consistently within specification.
- Demonstrates that operational and quality variables are identified and rectified.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPWPO4A: Troubleshoot and Rectify Waste Paper Plant Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPWPO4A.1 Identify and diagnose causes of systems and quality faults.	<ul> <li>Alarms are interpreted to determine and fault type and location.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Causes and sources of problems are identified and located and relevant personnel notified.</li> <li>Relevant sources of historical data are accessed/referred to, to confirm diagnosis.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPWPO4A.2 Rectify systems/machinery and ancillary equipment faults.	<ul> <li>Emergency stop/shutdown, isolation and lockout procedures are initiated prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated, repaired or replaced.</li> <li>Corrective adjustments and maintenance requirements to machinery/systems operation are made.</li> <li>Operator level preventative maintenance is carried out according to enterprise procedures.</li> <li>Restoration of machine/system to normal operation is verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWPO4A.3 Rectify quality faults.	<ul> <li>Quality faults/variations are identified by observation, systematic sampling and testing.</li> <li>Samples for a range of tests are taken according to established enterprise procedures.</li> <li>Test results are interpreted and operations are adjusted to correct deviations from specification.</li> <li>Recommendations for adjustments to system/process are communicated to relevant personnel.</li> <li>Out of specification product is dealt with according to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWPO4A.4 Record system performance and product quality data.	<ul> <li>Variations from specifications are recorded as required.</li> <li>Stock production and machine operation faults are recorded.</li> <li>Causes of variations and corrective actions undertaken are recorded as required.</li> <li>Relevant information is communicated to appropriate personnel.</li> </ul>

- Explains purpose and operation of reject systems.
- Explains purpose and operation of water systems.
- Describes purpose and effects of process variables on production/quality.
- Uses routine checking procedures during plant/systems operation.
- Uses troubleshooting guides and diagnostic procedures.
- Gathers data for analysis and interpretation.
- Conducts routine checks during plant/systems operation.
- · Explains types and purposes of tests.
- Sets up and operates test equipment.
- Implements sampling and testing procedures.
- · Interprets test results.
- Describes plant operation and control mechanisms.
- Logs and records requirements/procedures.
- · Uses keyboarding and computer access skills.
- · Communicates effectively with relevant personnel.
- Demonstrates that operational and quality variables are identified and rectified.
- Demonstrates that faults/causes are consistently identified and located.
- Demonstrates that faults are rectified or caused to be rectified with minimal delay to production, in accordance with site agreements.
- Demonstrates that plant operation is consistently maintained within specification.
- Demonstrates that stock quality is consistently within specification.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPWPO5A: Co-ordinate and Implement Waste Paper Plant Shutdown

ELEMENTS	PERFORMANCE CRITERIA
FPPWPO5A.1 Assess reason and effects of shutdown malfunction.	<ul> <li>Reasons for shutdown are identified, and appropriate personnel notified.</li> <li>Extent and effect of the shutdown on the waste paper plant is assessed.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPWPO5A.2 Implement shutdown procedures.	<ul> <li>Shutdown is managed, planned, organised and responded to according to reason for shutdown.</li> <li>Process supply sections of the waste paper plant are shutdown as required.</li> <li>Equipment and areas are isolated as required to ensure personnel safety.</li> <li>Shutdown information is communicated to the other personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWPO5A.3 Record and report shutdown data.	Shutdown information is recorded and reported to relevant personnel.

- Identifies type, causes and effects of plant shutdown.
- Interprets SOP for shutdown.
- · Plans and organises shutdown.
- Identifies and responds to shutdown problems.
- · Solves problems associated with shutdown.
- · Communicates problems accurately.
- Explains action required to protect people and equipment.
- Explains emergency procedures associated with shutdown.
- · Accesses and enters data in recording system.
- Demonstrates that shutdown is responded to effectively within SOP.
- Demonstrates that shutdown procedures are implemented effectively and efficiently.
- Demonstrates that precautions are taken to protect people and equipment.
- Demonstrates that information regarding shutdown is communicated accurately.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# STOCK PREPARATION OPERATIONS

	UNITS
FPPSPR1A	Prepare stock and chemical system for production.
FPPSPR2A	Co-ordinate and implement stock and chemical preparation start-up.
FPPSPR3A	Monitor and control stock and chemical preparation systems.
FPPSPR4A	Troubleshoot and rectify stock and chemical preparation systems.
FPPSPR5A	Co-ordinate and implement stock and chemical preparation system shutdown.
1	

# PLEASE NOTE:

A single Range Statement has been prepared to cover all Units in Stock Preparation Operations. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### **RANGE STATEMENT**

The competencies for this group of units relate to those systems and functions involved in stock preparation from unrefined pulp and broke to the machine chest and include:

- · refining systems
- blending system
- · proportioning system
- broke system
- dump chests
- · chemical/additive plants

#### Materials/supplies:

- water
- stock
- chemicals
- additives
- steam

#### **Equipment:**

- · refiners, pumps, valves, chests, agitators
- pulpers, screens, cleaners, disc deckers
- · monitoring and alarm systems

#### Legislation, policy and procedures:

- enterprise policy, procedures and guidelines
- OH&S and environmental regulatory requirements (state and commonwealth)
- · quality assurance requirements
- Standard Operating Procedures (SOP)

#### Documentation/procedures/reports:

- · Furnish specifications
- Material Safety Data Sheets (MSDS)
- Standard Operating Procedures (SOP)
- · Process and instrument diagrams

#### Maintenance:

- · as per site agreement
- operator maintenance schedules
- maintenance systems

#### Sampling/testing/quality checks: [excludes Units FPPSPR1A, FPPSPR5A]

- freeness/wetness
- pH
- consistency
- residuals
- flow rates
- concentrations

#### Technology:

· process control and monitoring equipment, input and extract data

# **Communication channels:**

- wet end operators
- · pulping operators
- service suppliers
- maintenance

- dry end operators
- supervisors
- · machine operators
- management

# Unit FPPSPR1A: Prepare Stock and Chemical System for Production

ELEMENTS	PERFORMANCE CRITERIA
FPPSPR1A.1 Interpret furnish.	<ul> <li>Stock and flow rate for grade requirements is established and communicated to relevant personnel.</li> <li>Chemical requirements are determined and their delivery systems set for operation.</li> <li>Water requirements are established.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPSPR1A.2 Inspect and prepare stock systems.	<ul> <li>Isolations are removed according to SOP.</li> <li>All power supplies are determined to be operationally ready to commence production.</li> <li>Appropriate systems are closed and/or activated to ensure they are operational.</li> <li>Stock systems are prepared and set to control flows to machine chest, to production requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSPR1A.3 Implement area housekeeping requirements.	<ul> <li>Routine checks and maintenance of work area are undertaken.</li> <li>Housekeeping/cleaning activities are conducted to ensure a safe and clean work area.</li> <li>Potential waste hazards are removed to designated areas, in compliance with SOP.</li> <li>Chemical/hazardous materials are disposed of as required by SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets documentation.
- Explains stock preparation processes and systems.
- Identifies the process controls within the system.
- Plans work within standard procedures.
- Explains and implements OH&S standards.
- Communicates information clearly to stock preparation operators.
- Accesses and interprets computer information.
- Interprets furnish requirements.
- Collects and collates information for decision-making.
- Demonstrates the ability to prepare stock preparation system for startup
- Maintains a clear and hazard free work area.
- Describes cause and affects of operational equipment faults and takes appropriate rectification action.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPSPR2A: Co-ordinate and Implement Stock and Chemical Preparation Start-Up

ELEMENTS	PERFORMANCE CRITERIA
FPPSPR2A.1 Synchronise stock chemical preparation functions.	<ul> <li>Procedures are implemented to start-up refiners and chests, agitators and chemical systems.</li> <li>Isolations are removed in accordance with standard operators procedures.</li> <li>Control system/display monitors are checked to confirm co-ordinated operation.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSPR2A.2 Process stock and chemicals through to machine chest.	<ul> <li>Stock and chemical preparation system save activated to achieve production requirements.</li> <li>Samples are taken as required to ensure product quality requirements will be met.</li> <li>Adjustments/modifications are made to stabilise stock preparation conditions.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains stock and chemical preparation processes and systems.
- Identifies the process controls within the system.
- Plans work within standard procedures.
- Communicates information clearly to stock preparation team.
- Accesses and interprets computer information.
- Interprets furnish requirements.
- Collects and collates information for decision-making.
- Implements isolations and lock nut procedures.
- Stock and chemical preparation processes are synchronised and started up to SOP.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPSPR3A: Monitor and Control Stock and Chemical Preparation Systems

	ELEMENTS	PERFORMANCE CRITERIA
FPPSP	R3A.1 Monitor stock and chemical quality/specifications.	<ul> <li>Stock and chemical quality is monitored and maintained within grade specifications.</li> <li>Sample test sheets and results are interpreted and data recorded as required.</li> <li>Process adjustments are made to ensure product quality meets furnish specifications meets the required product quality.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
SP3.2	Monitor and maintain machine and auxiliary operations.	<ul> <li>Equipment is monitored and adjustments made to ensure operating standards are met.</li> <li>Potential faults are identified and appropriate preventative action is taken.</li> <li>Changes to equipment operations are communicated to relevant personnel.</li> <li>Operator level preventative maintenance schedules are carried out according to enterprise procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
SP3.3	Record performance data.	<ul> <li>Documentation is maintained according to SOP.</li> <li>Problems or variations in performance are identified, recorded and communicated to relevant personnel.</li> </ul>

- Specifies the furnish specification requirements.
- Explains the purpose of each type of chemical/additive.
- Explains the effect of under and over addition of chemicals.
- Describes what is happening to equipment during the stock preparation process.
- · Locates problems in stock and equipment.
- Identifies and rectifies routine problems.
- · Communicates routine problems.
- · Adjusts process to meet grade specifications.
- · Accesses and enters information in computer system.
- Inspects and maintains machinery/systems as specifications.
- Demonstrates that problems are identified and promptly rectified and/or reported.
- Records performance in reporting system.
- Explains causes and effects of system faults and rectification requirements.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPSPR4A: Troubleshoot and Rectify Stock and Chemical Preparation Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPSPR4A.1 Identify and diagnose causes of systems and quality faults.	<ul> <li>Alarm systems are interpreted to determine fault type and location.</li> <li>Routine physical inspections of plant and processes are made to identify faults.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures and relevant historical data.</li> <li>Diagnoses are communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPSPR4A.2 Rectify product quality faults.	<ul> <li>Product quality faults/variations are identified.</li> <li>Samples for a range of tests are taken according to SOP.</li> <li>Test results are interpreted and processes are adjusted to correct variations from specification.</li> <li>Out of specification product is dealt with according to SOP's.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSPR4A.3 Rectify systems/machinery and auxiliary equipment faults.	<ul> <li>Emergency stop/shutdown, isolation procedures are initiated prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated and repaired/replaced according to level of responsibility.</li> <li>Machine/system is returned to normal operation, verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSPR4A.4 Record and report process performance and product quality data.	<ul> <li>Variations from specification of sheet production and machine operation faults are documented/logged.</li> <li>Corrective action undertaken is recorded as required.</li> <li>Variations from standards are identified and recorded.</li> <li>Information is communicated to appropriate personnel.</li> </ul>

- Identifies sources of historical and operational data.
- Interprets relevant verbal and written information.
- Explains systems, processes and functions.
- Identifies and implements in-process test requirements.
- Describes cause and effects of test results and actions.
- Explains impact of inappropriate responses.
- Explains product grade and process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- Identifies and implements operational procedures.
- Explains use and handling requirements of chemicals used; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- · Responds to emergencies/crash shutdowns in accordance with SOP.
- Isolations and lockouts according to SOP.
- Demonstrates that faults are rectified within site agreements.
- · Accesses and enters information in recording system.
- Communicates with other personnel/sections/departments to assist with diagnosis and resolution of operational problems.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPSPR5A: Co-ordinate and Implement Stock and Chemical Preparation System Shutdown

ELEMENTS	PERFORMANCE CRITERIA
FPPSPR5A.1 Assess causes and effects of malfunction/shutdown.	<ul> <li>Cause of stock preparation problem is identified, located and appropriate personnel notified.</li> <li>Extent and effect of the shutdown on the stock preparation and wet end is assessed.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPSPR5A.2 Implement shutdown procedures.	<ul> <li>Shutdown is managed, planned, organised and responded to according to type of shutdown.</li> <li>Equipment and areas are isolated as required to ensure personnel safety.</li> <li>Process supply system is shutdown and flushed as required.</li> <li>Isolations/lock-outs are initiated according to SOP to enable maintenance and/or fault rectification to be undertaken.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSPR5A.3 Record and report shutdown data.	Shutdown information is recorded and reported to relevant personnel.

- · Identifies type of shutdown.
- Interprets SOP for shutdown.
- · Plans and organises shutdown.
- Identifies and responds to shutdown problems.
- · Solves problems associated with shutdown.
- Communicates problems accurately.
- Explains action required to protect people and property.
- Explains emergency procedures.
- · Accesses and enters data in recording system.
- Demonstrates that shutdown procedures are implemented effectively and efficiently.
- Demonstrates that precautions are taken to protect people and property.
- Demonstrates that information regarding shutdown is communicated accurately.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# WET END OPERATIONS

UNITS	
FPPWEO1A	Prepare wet end for production.
FPPWEO2A	Co-ordinate and implement the wet end start-up operation.
FPPWEO3A	Monitor and control wet end operations.
FPPWEO4A	Troubleshoot and rectify wet end systems.
FPPWEO5A	Co-ordinate and implement wet end shutdown.

# PLEASE NOTE:

A single Range Statement has been prepared to cover all Units in Wet End Operations. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### **RANGE STATEMENT**

The competencies for Wet End Operations are consistent with those required when working within the following wet end processes:

- · stock approach systems
- forming system
- pressing systems
- · cleaning and screening system

#### Materials/supplies:

- water
- air
- stock
- chemicals
- additives
- steam
- machine clothing (felts/fabrics)

#### **Equipment:**

- screens
- forming section
- water/chemical/vacuum/stock systems
- former
- presses/felts
- · yankee drier and associated equipment
- · monitoring, control and alarm systems
- cleaners

# Legislation, policy and procedures:

- enterprise policy, procedures and guidelines
- · OH&S and environmental regulatory requirements (state and commonwealth)
- quality assurance requirements
- Standard Operating Procedures (SOP)

#### **Documentation/procedures/reports:**

- Standard Operating Procedures (SOP)
- Machine Safety Data Sheets (MSDS)
- grade specifications
- computer system
- operating logs
- site requirements
- · process and instrument diagrams

#### Maintenance:

- · as per site agreement
- operator maintenance schedules
- maintenance systems

# Technology:

· process control and monitoring equipment

#### Communication channels:

- internal/external suppliers/customers
- maintenance services
- team members
- production/services co-ordinator

# Unit FPPWEO1A: Prepare Wet End for Production

ELEMENTS	PERFORMANCE CRITERIA
FPPWEO1A.1 Interpret furnish.	<ul> <li>Stock and flow rate for grade requirements is established and communicated to relevant personnel.</li> <li>Chemical requirements are determined and their delivery systems set for operation.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPWEO1A.2 Inspect and prepare supply systems.	<ul> <li>Isolations are removed according to SOP.</li> <li>All power supplies (electrical, steam, air and water) are determined to be operationally ready to commence production.</li> <li>Water requirements and recirculation are established</li> <li>Appropriate systems are closed and/or activated to ensure they are operational.</li> <li>Water systems are inspected and prepared for use.</li> <li>Stock approach systems are prepared and set to control flows to production requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWEO1A.3 Inspect and prepare forming section.	<ul> <li>Isolations are removed according to SOP</li> <li>All power supplies (electrical, steam, air and water) are determined to be operationally ready to commence production.</li> <li>Auxiliary equipment and systems are checked to ensure they are operational.</li> <li>Fabrics/wires are cleaned, tensioned and guiding systems are set ready for start-up.</li> <li>Former showers and associated systems are operational.</li> <li>Doctor blades or roll cleaning systems are operational.</li> <li>Broke and/or forming vacuum systems are set for operation.</li> <li>Operator level preventative maintenance is carried out to enterprise procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWEO1A.4 Inspect and prepare press/felts section.	<ul> <li>Isolations are removed according to SOP.</li> <li>All power supplies (electrical, steam and water) are determined to be operationally ready to commence production.</li> <li>Auxiliary press section equipment and systems are checked to ensure they are operational.</li> <li>Felt conditioning, press shower systems and doctor blades are confirmed to be operational.</li> </ul>

•	Pre	ess vacuum	n systems	are o	perational.	
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ELEMENTS	PERFORMANCE CRITERIA		
FPPWEO1A.4 Inspect and prepare press section cont.	<ul> <li>Press/felts are cleaned and tensioned and guiding systems are confirmed to be operational.</li> <li>Operator level preventative maintenance is carried out to enterprise procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>		
FPPWEO1A.5 Implement area housekeeping requirements.	<ul> <li>Routine checks and maintenance of work area are undertaken.</li> <li>Housekeeping/cleaning activities are conducted to ensure a safe and clean work area.</li> <li>Potential waste hazards are removed to designated areas, in compliance with SOP.</li> <li>Chemical/hazardous materials are disposed of as required by SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>		

- Explains wet end processes and systems.
- Identifies the process controls within the system.
- Plan work within standard procedures.
- Interprets documentation.
- Communicates information clearly to work team.
- · Accesses and interprets computer information.
- Interprets grade requirements.
- Collects and collates information for decision-making.
- Communicates effectively with internal suppliers.
- Implements isolations and lockout procedures.
- Implements confined space procedures.
- Demonstrates that stock approach systems are prepared for starting.
- Informs internal suppliers that their resources are to be used.
- Demonstrates that forming section is prepared for start-up.
- Demonstrates that press section is prepared for start-up.
- Demonstrates that auxiliary systems are prepared ready for start-up.
- Inspects and maintains equipment/systems to specifications.
- Cleans and maintains hazard free work area.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWEO2A: Co-ordinate and Implement the Wet End Start-Up Operations

ELEMENTS	PERFORMANCE CRITERIA		
FPPWEO2A.1 Synchronise machine functions and auxiliary systems for production run.	<ul> <li>Machine and auxiliary systems startup procedures are initiated.</li> <li>Forming operation procedures are implemented for the establishment of the wet web.</li> <li>Press operating procedures are initiated to enable the sheet to be transferred.</li> <li>Control system/display monitors are checked to confirm co-ordinated operation.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>		
FPPWEO2A.2 Establish sheet on the wire/fabric.	<ul> <li>Stock system is activated to bring stock onto wire.</li> <li>Sheet is established on wire and process is adjusted to meet grade specifications.</li> <li>Samples are taken as required to ensure product quality requirements will be met.</li> <li>Adjustments/modifications are made to stabilise wet end conditions.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>		
FPPWEO2A.3 Transfer sheet to felt/press.	<ul> <li>Sheet/tail is transferred to felt/press section.</li> <li>Press operation and sheet condition is inspected to confirm that operation is within specification.</li> <li>Adjustments/modifications are made, if required, to ensure production quality requirements are maintained.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>		

- · Explains wet end processes and systems.
- Identifies the process controls within the system.
- Plan work within standard procedures.
- Communicates information clearly to wet end team.
- Accesses and interprets computer information.
- Interprets grade requirements.
- Collects and collates information for decision-making.
- Explains the wet end safety precautions.
- Describes causes and effects of operational equipment faults and takes appropriate corrective action
- · Startup wet end systems.
- · Demonstrates that sheet is established on the wire.
- Demonstrates that sheet is transferred to the press.
- Conducts sampling and testing within SOP.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWEO3A: Monitor and Control Wet End Operations

ELEMENTS	PERFORMANCE CRITERIA
FPPWEO3A.1 Monitor product quality/specifications.	<ul> <li>Product quality is monitored and maintained within grade specifications.</li> <li>Check levels are monitored and maintained.</li> <li>Sample test sheets and results are interpreted and data recorded as required.</li> <li>Process adjustments are made to ensure product quality meets grade specifications.</li> <li>Changes to product requirements are communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPWEO3A.2 Monitor and control machine and auxiliary operations.	<ul> <li>Machine and auxiliary operations are monitored and adjustments made to ensure operating standards are met.</li> <li>Process supplies are maintained to production requirements.</li> <li>Potential machine faults are identified and appropriate preventative action is taken.</li> <li>Changes to machine operations are communicated to relevant personnel.</li> <li>Operator level preventative maintenance is carried out according to enterprise procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWEO3A.3 Respond to wet end paper breaks.	<ul> <li>Action is taken to co-ordinate machine to restore production.</li> <li>Wet end is returned to normal operating condition.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWEO3A.4 Record performance data.	<ul> <li>Documentation is maintained according to enterprise requirements.</li> <li>Problems or variations in performance are identified, recorded and communicated to relevant personnel.</li> </ul>

- Interprets the grade specification requirements.
- Explains the purpose of each type of chemical/additive.
- Explains the effect of under and over addition of chemicals.
- Describes what is happening to equipment during the wet end process.
- Identifies problems in product and equipment.
- · Identifies and rectifies routine problems.
- · Accesses, interprets and adjusts computer information.
- Communicates routine problems within SOP.
- · Adjusts process to meet grade specifications.
- · Accesses and enters information in computer system.
- Demonstrates ability to rectify machine paper breaks.
- Explains effect of plant malfunction on the environmental performance of the mill.
- Demonstrates basic understanding of the environmental licence conditions.
- Explain the wet end safety procedures.
- Inspects and maintains equipment/auxiliary, equipment/services written operating standards.
- Demonstrates that product grade specifications are achieved within SOP.
- Demonstrates that problems are identified and promptly rectified and/or reported.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWEO4A: Troubleshoot and Rectify Wet End Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPWEO4A.1 Identify and diagnose causes of systems and quality faults.	<ul> <li>Alarm systems are interpreted to determine fault type and location.</li> <li>Routine physical inspections of plant and processes are made to identify faults.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures and relevant historical data.</li> <li>Preventative action is taken to minimise faults.</li> <li>Diagnoses are communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPWEO4A.2 Rectify product quality faults.	<ul> <li>Product quality faults/variations are identified by observation inspection and testing.</li> <li>Samples for a range of tests are taken according to established enterprise procedures and SOP.</li> <li>Test results are interpreted and processes are adjusted to correct variations from specification.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWEO4A.3 Rectify systems/machinery and auxiliary equipment faults.	<ul> <li>Emergency stop/shutdown are initiated if required.</li> <li>Faulty equipment is bypassed to maintain production wherever possible.</li> <li>Faulty equipment/instrumentation is isolated/locked out and repaired/replaced according to level of responsibility.</li> <li>Out of specification product is dealt with in accordance with SOP.</li> <li>Machine/system is returned to normal operation, verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWEO4A.4 Change machine clothing.	<ul> <li>Machine clothing is monitored to determine whether it is performing to specification.</li> <li>Machine clothing is changed and adjusted.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWEO4A.5 Record and report process performance and product quality data.	<ul> <li>Variations from specification of sheet production and machine operation faults are documented/logged.</li> <li>Indications of performance variations are entered into log.</li> <li>Assessment and evaluation of causes of deviation, and corrective action undertaken is recorded.</li> <li>Information is communicated to appropriate personnel.</li> </ul>

- Explains troubleshooting process.
- · Explains emergency procedures.
- Diagnoses problems.
- Interprets historical data.
- · Repairs routine problems with equipment.
- · Interprets test results.
- Adjusts process to maintain production and quality.
- · Accesses and enters information in recording system.
- · Isolates equipment in accordance with SOP.
- Changes and adjusts machine clothing to enterprise and manufacturers requirements.
- Explains effect of plant malfunction on the environmental performance of the mill.
- Demonstrates basic understanding of the environmental licence conditions.
- · Demonstrates knowledge of the mill maintenance systems.
- Implements confined space procedures.
- Demonstrates that problems are accurately diagnosed using observation, test results and historical data.
- · Demonstrates that product problems are rectified.
- Demonstrates that routine system, machine and auxiliary equipment problems are rectified.
- · Responds non-routine problems within SOP.
- · Communicates with relevant personnel.
- Explains causes and effects of system faults and rectification requirements.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWEO5A: Co-ordinate and Implement Wet End Shutdown

ELEMENTS	PERFORMANCE CRITERIA
FPPWEO5A.1 Assess reason and effects of shutdown malfunction.	<ul> <li>Reasons for shutdown are identified and appropriate personnel notified.</li> <li>Extent and effect of the shutdown on the wet end is assessed.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPWEO5A.2 Implement shutdown procedures.	<ul> <li>Shutdown is managed, planned, organised and responded to according to reason for shutdown.</li> <li>Process supply sections of the wet end are shutdown as required.</li> <li>Equipment and areas are isolated as required to ensure personnel safety.</li> <li>Stock chests and water tanks are dumped to clear system.</li> <li>Machine clothing is washed, stopped and protected or changed according to SOP.</li> <li>Shutdown information is communicated to the other personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWE05A.3 Record and report shutdown data.	Shutdown information is recorded and reported to relevant personnel.

- Identifies type of shutdown.
- Interprets SOP for shutdown.
- Plans and organises shutdown.
- Identifies and responds to shutdown problems.
- · Solves problems associated with shutdown.
- · Communicates problems accurately.
- Explains action required to protect people and equipment.
- Explains emergency procedures associated with shutdown.
- · Accesses and enters data in recording system.
- Demonstrates that shutdown is responded to effectively within SOP.
- Demonstrates that shutdown procedures are implemented effectively and efficiently.
- Demonstrates that precautions are taken to protect people and equipment.
- · Communicates information regarding shutdown is accurately.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **DRY END OPERATIONS**

UNITS		
FPPDEO1A	Prepare dry end for production.	
FPPDEO2A	Co-ordinate and implement dry end start-up.	
FPPDEO3A	Monitor and control dry end operations.	
FPPDEO4A	Troubleshoot and rectify dry end systems.	
FPPDEO5A	Co-ordinate and implement dry end shutdown.	

#### PLEASE NOTE:

A single Range Statement has been prepared to cover all Units in Dry End Operations. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### **RANGE STATEMENT**

The competencies described in this group of units relate to those systems and functions inclusive from dryer to parent reel/roll and include the following:

- drying processes
- chemical additive system
- sheet treatment processes
- broke system
- calendering systems

- · reeling operations
- monitoring systems
- tail feed systems
- · on-line coating systems

#### Materials/supplies:

- chemicals
- water
- steam
- felts/fabrics
- · dry screens

- compressed air
- electricity/gas
- additives
- machine clothing
- ropes

#### **Equipment:**

- · equipment appropriate to the dry end processes
- hand and power tools

#### Legislation, policy and procedures:

- OH&S
- · statutory legislation
- Standard Operating Procedures (SOP)
- environmental
- enterprise policies and procedures
- · quality assurance

#### **Documentation/procedures/reports:**

- SOP
- maintenance logs
- operating log
- Materials Safety Data Sheets (MSDS)
- process and instrument diagrams
- grade specifications
- job sheets
- production instructions

#### Maintenance:

- as per site agreement
- operator maintenance schedules
- maintenance systems

#### Sampling/testing/quality checks: [excludes Units FPPDEO1A, FPPDEO5A]

As per site agreement and may include the following:

- weight
- colour
- burst
- tensile

- moisture
- · thickness/bulk
- calliper

#### **Technology:**

- computer systems
- process control systems (analogue/digital)
- electronic screens and alarms

#### Communication channels:

- team members
- internal/external suppliers and customers
- production/services co-ordinators
- maintenance services

### Unit FPPDEO1A: Prepare Dry End for Production

ELEMENTS	PERFORMANCE CRITERIA
FPPDEO1A.1 Establish production requirements.	<ul> <li>Paper grade specifications and limits are confirmed.</li> <li>Process supplies are confirmed available for production.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPDEO1A.2 Inspect systems and process functions.	<ul> <li>All isolations are removed in accordance with SOP.</li> <li>Pre start checks are conducted on process systems and equipment as required.</li> <li>Faults are identified and rectified as required according to SOP.</li> <li>Operational maintenance requirements are undertaken in accordance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO1A.3 Implement area housekeeping and cleaning.	<ul> <li>Routine checks and maintenance of work area are undertaken.</li> <li>Housekeeping/cleaning activities are conducted to ensure a safe and clean work area.</li> <li>Potential waste hazards are removed to designated areas, in compliance with SOP.</li> <li>Chemical/hazardous materials are disposed of as required by enterprise SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains purpose and functions of the dry end processes.
- Interprets work instructions and Standard Operating Procedures.
- Interprets documentation.
- · Conducts pre-start checks and procedures.
- Describes causes and effects of operational equipment faults and takes appropriate rectification action.
- Explains safe handling, use and disposal of chemicals and additives.
- · Identifies problems and faults.
- Uses technology to assist work performance.
- Communicates effectively with relevant personnel.
- Implements isolation and lockout procedures.
- Implements confined space procedures.
- Inspects and maintains equipment systems and specifications.
- Demonstrates that plant/systems are prepared according to SOP and production requirements.
- Demonstrates that plant and system faults are identified and handled according to SOP.
- Demonstrates that plant work area is clear and hazard free.
- Demonstrates that process supplies are available for start-up.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPDEO2A: Co-ordinate and Implement Dry End Start-Up

ELEMENTS	PERFORMANCE CRITERIA
FPPDEO2A.1 Start-up drying section for production process	<ul> <li>Process supplies availability is confirmed.</li> <li>Systems are started in accordance with Standard Operating Procedures.</li> <li>Process supplies are set and adjusted if required.</li> <li>Control systems and monitoring devices are checked to confirm operation.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO2A.2 Initiate drying process.	<ul> <li>Production process start and co-ordinated confirmed with relevant personnel.</li> <li>Sheet is established and stabilised through dry end sections to parent reel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO2A.3 Confirm product quality.	<ul> <li>Sheet quality is stabilised and verified to be within grade specification.</li> <li>Process adjustments are made to meet quality requirements.</li> <li>System operation and quality data is logged/recorded as required.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets work instructions, test results and Standard Operating Procedures (SOP).
- Explains plant and systems operation and purpose.
- Explains causes and effects of system faults and rectification requirements.
- Describes in-process tests and procedures.
- Explains the effect of process adjustments.
- · Describes fault causes and effects.
- Visually observes and identifies routine problems and faults.
- Uses technology to assist work performance.
- Demonstrates start-up of the dry end.
- Stabilises sheet is on the reel consistently within requirements.
- · Maintains quality specifications.
- · Identifies and handles plant and system faults according to SOP.
- Maintains plant work area clear and hazard free.
- Works within OH&S, SOP, environmental and safe working requirements and practices..

## Unit FPPDEO3A: Monitor and Control Dry End Operations

ELEMENTS	PERFORMANCE CRITERIA
FPPDEO3A.1 Monitor and maintain process/systems.	<ul> <li>Process supplies are maintained to production requirements.</li> <li>Systems are monitored to ensure dry end operations are within specification.</li> <li>All process and system variations from specification are identified, rectified and/or reported according to Standard Operating Procedures.</li> <li>Operator level preventative maintenance is carried out according to enterprise procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO3A.2 Control product quality.	<ul> <li>Sheet is monitored and maintained to quality requirements.</li> <li>Routine observations and assessments are conducted on product and systems operations.</li> <li>Systems operations adjustments are made to rectify out-of-specification product quality.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO3A.3 Change machine clothing.	<ul> <li>Machine clothing is monitored to determine whether it is performing to specification.</li> <li>Machine clothing is changed and maintained to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO3A.4 Record and report product and process performance data.	<ul> <li>Systems and production data is interpreted and entered into recording system.</li> <li>Problems or variations with systems or product are communicated to relevant personnel.</li> </ul>

- Interprets work instructions, test results and Standard Operating Procedures (SOP).
- Explains plant and systems operation and purpose.
- · Describes in-process tests and procedures.
- Explains the effect of process adjustments.
- Describes fault causes and effects of systems and rectification requirements.
- Observes and identifies routine problems and faults.
- Uses technology to assist work performance.
- Inspects and maintains dry end systems to specifications.
- · Stabilises sheet consistently within required time.
- Maintains quality specifications.
- Maintains process operations are maintained.
- Identifies and handles plant and system faults according to SOP.
- Maintains plant work area clear and hazard free.
- Records operational data as per SOP.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPDEO4A: Troubleshoot and Rectify Dry End Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPDEO4A.1 Identify and diagnose causes of systems and quality faults.	<ul> <li>Alarm systems and observations are interpreted to determine fault type and location.</li> <li>Routine inspections of plant and processes are made to identify faults.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures.</li> <li>Relevant historical data accessed/referred to, to confirm diagnosis.</li> <li>Diagnoses are communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPDEO4A.2 Rectify systems/machinery and ancillary equipment faults.	<ul> <li>Emergency stop/shutdown, isolation and lockout procedures are initiated prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated and repaired/replaced.</li> <li>Faulty equipment is by-passed where the process allows.</li> <li>Corrective adjustments and maintenance requirements to machinery/systems operation are made.</li> <li>Restoration to normal operation is verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO4A.3 Rectify product quality faults.	<ul> <li>Samples for a range of tests are taken according to established enterprise procedures and SOP.</li> <li>Test results are interpreted and operations are adjusted to correct variations from specification.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO4A.4 Record and report process performance and product quality data.	<ul> <li>Variations from specification of sheet production and machine operation faults are documented/logged.</li> <li>Indications of performance variation are entered into log.</li> <li>Causes of deviation from standards are assessed and evaluated.</li> <li>Corrective action is undertaken and is recorded.</li> <li>Out of specification product is required within SOP.</li> <li>Relevant information is communicated to appropriate personnel to prepare for modification to the production run.</li> </ul>

- · Describes systems, plant and equipment operation.
- Explains faults and effects on operations.
- Explains causes and effects of crash shut and describes procedures to be undertaken.
- Demonstrates the understanding of environmental licence conditions.
- Interprets troubleshooting guides, operational data, trend analysis and test results.
- Uses effective data gathering and analysis techniques.
- Operates test equipment.
- Logs and records information.
- Operates communication systems.
- Uses technology to assist performance.
- · Uses effective communication.
- Demonstrates ability to resolve product/process problems.
- Demonstrates ability to identify causes of locate and respond appropriately to crash shuts.
- Rectify or caused to be rectified faults within site agreements.
- · Implements isolations/lockouts procedures.
- Communicates with other personnel to assist with diagnosis and resolution of operational problems.
- Adjusts process to maintain production and quality.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

## Unit FPPDEO5A: Co-ordinate and Implement Dry End Shutdown

ELEMENTS	PERFORMANCE CRITERIA
FPPDEO5A.1 Establish and/or assess cause and effect of malfunction/shutdown	<ul> <li>Planned shutdown is established from work area instructions or maintenance schedules.</li> <li>Abnormal operating conditions are identified by analysis of technical and operational information.</li> <li>Effects of abnormal conditions are determined to enable appropriate action to be taken in accordance with Standard Operating Procedures (SOP).</li> <li>Source of shutdown cause is located to ensure rectification in accordance with SOP.</li> <li>Appropriate personnel are notified when abnormal operating conditions are identified.</li> <li>Safety issues are identified to ensure compliance with SOP.</li> </ul>
FPPDEO5A.2 Implement shutdown procedures.	<ul> <li>Isolation/lock out requirements are implemented according to SOP.</li> <li>Process supplies shutdown procedures are followed as required.</li> <li>Plant/system shutdown is managed in accordance with relevant procedures.</li> <li>Plant integrity and personnel safety is ensured in compliance with SOP.</li> <li>Shutdown information is communicated to relevant personnel as required.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPDEO5A.3 Record and report shutdown data.	<ul> <li>Planned/crash shutdown data is entered/logged as required by SOP.</li> <li>Assessments and evaluations of causes, and corrective actions undertaken are recorded as required.</li> <li>Relevant information is communicated to appropriate personnel in accordance with operational requirements.</li> </ul>

- · Describes types and causes of shutdowns.
- Explains routines, procedures, and safety related to shutdowns.
- Explains effects of shutdowns to the rest of the systems.
- Explains isolations and lockouts and the procedures for implementing them.
- · Describes problem-solving techniques.
- Describes the procedures involved with emergency and planned shutdown conditions.
- · Uses effective communication and observation skills.
- Explains logging and recording of information requirements.
- Demonstrates ability to handle dry end shutdown.
- Responds to shut situations promptly and according to enterprise procedures.
- Implements personnel protection and plant security priorities according to Standard Operating Procmdures (SOP).
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **COATING SYSTEMS**

UNITS		
FPPOLC1A	Prepare systems for coated paper production.	
FPPOLC2A	Co-ordinate and implement systems for coated paper production.	
FPPOLC3A	Monitor and control coated paper systems operation.	
FPPOLC4A	Co-ordinate coated paper systems shutdown.	
FPPOLC5A	Troubleshoot and rectify coated paper systems.	

#### **PLEASE NOTE:**

A single Range Statement has been prepared to cover all Units in Off-Line Coating Operations. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### **RANGE STATEMENT**

The competencies described in this group of units relate to those systems and functions involved in the off-line coating process and include the following:

- · coating process
- coating makedown
- clay plant operation
- pre reeler operations
- monitoring systems
- · drying systems
- · material makedown
- · starch cooking
- testing

- · tail feed systems
- splicing
- calender
- super calendering
- rewindering
- · carbornate makedown
- internal unloading
- · combine rollers

#### Materials/supplies:

- chemicals
- water
- steam
- felts
- gas
- air

- power
- additives
- labels
- equipment
- accessories (parts)
- base paper

#### **Equipment:**

equipment appropriate to the off-line coating processes, for example, coater, splicer, pre
reelers, calender, super calender, parent rolls/reels, cranes, pigment and coating
makedown, starch cooking.

#### Legislation, policy and procedures:

- OH&S
- legislation (state and commonwealth)
- Standard Operating Procedures (SOP)
- · environmental requirements
- enterprise policies and procedures
- · quality assurance

#### **Documentation/procedures/reports:**

- SOP
- maintenance logs
- site agreements
- process and instrument diagrams
- product specifications/schedules
- job sheets
- · safety instructions

#### Maintenance:

- as per site agreement
- · operator maintenance schedules
- · maintenance suppliers

#### Technology:

- · computer systems
- process control systems

electronic screens and alarms

#### **Communication channels:**

- internal/external customers and suppliers
- production/service co-ordinator
- · team members
- maintenance service

# Unit FPPOLC1A: Prepare Coated Paper Systems for Production

ELEMENTS	PERFORMANCE CRITERIA
FPPOLC1A.1 Establish production requirements.	<ul> <li>Grade specifications and limits are confirmed.</li> <li>Process supplies are confirmed available for production.</li> <li>Chemical requirements are determined and their delivery systems set for operation.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPOLC1A.2 Inspect systems and process functions.	<ul> <li>All isolations are removed according to SOP.</li> <li>Pre start checks are conducted on process systems and equipment as required.</li> <li>Faults are identified and rectified as required according to SOP.</li> <li>Production requirements/status of coating system is confirmed.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPOLC1A.3 Implement area housekeeping and cleaning.	<ul> <li>Potential waste hazards are removed to designated areas, in compliance with SOP.</li> <li>Chemical/hazardous materials are disposed of as required by enterprise SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains purpose and functions of the coating system.
- Interprets documentation.
- Explains plant and systems operation and purpose.
- · Conducts pre-start checks and procedures.
- · Describes fault causes and effects.
- · Operates equipment in the coating system.
- Explains safe handling, use and disposal of chemicals and additives.
- Visually observes and identifies routine problems and faults.
- Uses technology to assist work performance.
- Prepares plant/systems according to SOP and production requirements.
- · Identifies and handles plant and system faults according to SOP.
- Maintains plant work area clear and hazard free.
- Demonstrates that process supplies are available for start-up.
- Co-ordinates start-up with other relevant sections.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### Unit FPPOLC2A: Co-ordinate and Implement Systems for Coated Paper Production

ELEMENTS	PERFORMANCE CRITERIA
FPPOLC2A.1 Start-up coating system functions for production.	<ul> <li>Systems are started in accordance with Standard Operating Procedures (SOP).</li> <li>Process supplies are set and adjusted if required.</li> <li>Control systems and monitoring devices are checked to confirm operation.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPOLC2A.2 Establish and stabilise process.	<ul> <li>Start-up is co-ordinated with relevant personnel.</li> <li>Process is established and stabilised through coating system.</li> <li>Control systems are introduced to process.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPOLC2A.3 Confirm product quality.	<ul> <li>Product quality is stabilised and verified to be within specification.</li> <li>Process adjustments are made to meet quality requirements.</li> <li>System operation and quality data is logged/recorded as required.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets work instructions, test results and SOP.
- Explains plant and systems operation and purpose.
- · Conducts start-up checks and procedures.
- Operates coating system equipment
- Explains the effect of process adjustments during startup.
- · Describes fault causes and effects during startup.
- Explains safe handling, use and disposal of chemicals and additives.
- Visually observes and identifies routine problems and faults.
- Uses technology to assist work performance.
- Communicates effectively with suppliers and customers.
- Stabilises sheet on the reel consistently within required time.
- Maintains quality specifications.
- · Identifies and handles plant and system faults according to SOP.
- Maintains plant work area clear and hazard free.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

## Unit FPPOLC3A: Monitor and Control Coated Paper Systems Operation

ELEMENTS	PERFORMANCE CRITERIA
FPPOLC3A.1 Monitor and maintain process/systems.	<ul> <li>Process supplies are maintained to production requirements.</li> <li>Systems are monitored to ensure coating system operations are within specification.</li> <li>Chest levels are monitored and maintained</li> <li>Operator level preventative maintenance schedules are carried out to enterprise procedures.</li> <li>Routine process and system variations from specification are identified, rectified and/or reported according to Standard Operating Procedures (SOP).</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPOLC3A.2 Monitor and maintain product quality.	<ul> <li>Product/process is monitored and maintained to quality requirements.</li> <li>Routine visual observations and assessments are conducted on product and systems operations.</li> <li>Sampling and testing is carried out to SOP.</li> <li>Systems operations adjustments are made to rectify out-of-specification quality.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPOLC3A.3 Record and report product and process performance data.	<ul> <li>Systems and production data is interpreted and entered into recording system.</li> <li>Problems or variations with systems or product are communicated to relevant personnel.</li> </ul>

- Interprets work instructions, test results and SOP.
- Explains plant and systems operation and purpose.
- · Conducts start-up checks and procedures.
- · Describes in-process tests and procedures.
- Sets up and uses test equipment.
- Explains the effect of process adjustments during monitoring and operation.
- Describes system fault causes and effects and rectification requirements.
- Explains safe handling, use and disposal of chemicals and additives.
- Visually observes and identifies routine problems and faults.
- · Uses technology to assist work performance.
- Inspects and maintains equipment/systems to specifications.
- · Maintains quality specifications.
- Maintains process operations.
- · Identifies and handles plant and system faults according to SOP.
- Maintains plant work area clear and hazard free.
- Records operational data as per SOP.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPOLC4A: Co-ordinate Coated Paper Systems Shutdown

ELEMENTS	PERFORMANCE CRITERIA
FPPOLC4A.1 Establish and/or assess cause and effect of malfunction/shutdown	<ul> <li>Planned shutdown is established from work area instructions or maintenance schedules.</li> <li>Abnormal operating conditions are identified by analysis of technical and operational information.</li> <li>Effects of abnormal conditions are determined to enable appropriate action to be taken in accordance with Standard Operating Procedures (SOP).</li> <li>Source of shutdown cause is located to ensure rectification in accordance with SOP.</li> <li>Appropriate personnel are notified when abnormal operating conditions prevail.</li> <li>Safety issues are identified to ensure compliance with SOP.</li> </ul>
FPPOLC4A.2 Implement shutdown procedures.	<ul> <li>Isolation and lock out requirements are implemented according to SOP.</li> <li>Process supplies shutdown procedures are followed as required.</li> <li>Plant/system shutdown is managed in accordance with relevant procedures.</li> <li>Plant integrity and personnel safety is ensured in compliance with SOP.</li> <li>Shutdown information is communicated to relevant personnel as required.</li> <li>Plant and equipment is washed and cleaned for restart.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPOLC4A.3 Record and report shutdown data.	<ul> <li>Planned/crash shutdown data is entered/logged as required by SOP.</li> <li>Assessments and evaluations of causes, and corrective actions undertaken are recorded as required.</li> <li>Relevant information is communicated to appropriate personnel in accordance with operational requirements.</li> </ul>

- · Describes types and causes of shutdowns.
- Explains routines, procedures, and safety related to shutdowns.
- Explains effects of shutdowns to the rest of the systems.
- Explains isolations and lockouts and the procedures for implementing them.
- · Describes problem-solving techniques.
- Implements emergency shutdown procedures.
- Uses effective communication and observation skills.
- Reacts to shut situations promptly and according to enterprise procedures.
- Implements personnel protection and plant security priorities according to SOP.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### Unit FPPOLC5A: Troubleshoot and Rectify Coated Paper Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPOLC5A.1 Identify and diagnose causes of systems and quality faults.	<ul> <li>Visual assessments and machine alarm systems are interpreted to determine fault type and location.</li> <li>Routine physical inspections of plant and processes are made to identify faults.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures.</li> <li>Relevant historical data accessed/referred to, to confirm diagnosis.</li> <li>Diagnoses are communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPOLC5A.2 Rectify systems/machinery and ancillary equipment faults.	<ul> <li>Emergency stop/shutdown, isolation and lockout procedures are initiated prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated and repaired/replaced.</li> <li>Corrective adjustments and maintenance requirements to machinery/systems operation are made.</li> <li>Restoration to normal operation is verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPOLC5A.3 Rectify product quality faults.	<ul> <li>Product faults/variations are identified by observation, systematic sampling and testing.</li> <li>Out of specification product is dealt with according to SOP's.</li> <li>Samples for a range of tests are taken according to established enterprise procedures and SOP.</li> <li>Tests and test procedures comply with SOP.</li> <li>Test results are interpreted and operations are adjusted to correct variations from specification.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPOLC5A.4 Record and report process performance and product quality data.	<ul> <li>Produced variations from specification and machine operation faults are documented/logged</li> <li>Indications of performance variation are entered into log</li> <li>Assessment and evaluation of causes of deviation, and corrective action undertaken is recorded as required.</li> <li>Relevant information is communicated to appropriate personnel to prepare for modification to the production run.</li> </ul>

- Identifies sources of historical and operational data.
- Interprets relevant verbal and written information.
- Explains systems, processes and functions.
- Identifies and implements in-process test requirements.
- · Describes cause and effects of test results and actions.
- Explains impact of inappropriate responses.
- Explains product grade and process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- · Identifies and implements operational procedures.
- Explains use and handling requirements of chemicals used; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- Responds to emergencies/crash shutdowns in accordance with SOP.
- Implements isolations and lockouts according to SOP.
- Maintains grade specification/quality or initiates appropriate action to rectify.
- · Rectifies faults within site agreements.
- Recommendations for further action are made.
- Maintains plant operation/production with minimal interruptions.
- Complies with relevant OH&S and SOP requirements.
- Interprets trouble shooting guides, operational data, treat analysis and test results.
- Uses effective data gathering and analysis techniques.
- · Operates test equipment.
- Logs and records information.
- Communicates with other personnel/sections/departments to assist with diagnosis and resolution of operational problems.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### FINISHING AND CONVERTING

#### UNITS

**FPPFCO1A** Prepare finishing/converting systems for production.

**FPPFCO2A** Monitor and control finishing/converting systems operation.

**FPPFCO3A** Package product.

**FPPFCO4A** Troubleshoot and rectify finishing and converting systems.

**FPPFCO5A** Store product.

**FPPFCO6A** Prepare and despatch product.

#### **PLEASE NOTE:**

A single Range Statement has been prepared to cover all Units in Finishing and Converting. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### RANGE STATEMENT

The competencies referred to in this group of units are consistent with those required to set up, operate, and maintain the operation of the following plant, systems and equipment used in the finishing and converting processes:

- winding/re-winding
   water marking
- slitting and cutting
- folding
- core making
- embossing
- printing
- wrapping and packing
- perforating
- laminating
- bonding

The competencies relate to the processes involved from the parent reel to reels/sheets as per the next internal/external customer requirement.

#### Materials/supplies:

- parent roll/reel
- sheet paper
- customer rolls
- glues
- printing inks
- signs and labels
- unitised pallets
- compressed air

- shrink and stretch wraps
- labelling and stencilling
- boxes
- cartons
- shippers
- core board
- rolls

- pallets
- wrap paper
- · polythene wrap
- strapping
- reams
- scent
- strapping

#### **Equipment:**

- reels and winding equipment
- guillotine, knives, cutting equipment
- variety of finishing and converting processes equipment
- flexographic printing equipment
- scales

- wrapping/packing equipment
- · conveying systems
- · mechanical handling equipment (manual, motorised)
- overhead cranes
- · roll grab attachments

#### Legislation, policy and procedures:

- relevant endorsed licences
- enterprise policies, procedures and guidelines
- · OH&S and environmental requirements (state and commonwealth
- quality assurance requirements
- · oil/chemical spills and disposal guidelines

#### Documentation/procedures/reports:

- production schedules [excludes FPPFCO6A]
   stock inventory [excludes FPPFCO1A, FC02]
- work orders FPPFCO1A,
- process and instrument diagrams
- Standard Operating Procedures (SOP)
- quality assurance documentation (eg. ISO 9002)
- despatch documentation [excludes
  - FPPFCO5A1
- customer orders
- Material Safety Data Sheets (MSDS)

#### Maintenance:

- · as per site agreement
- · maintenance supplies

- · operator maintenance schedules
- Quality assessments: [excludes Unit FPPFCO1A]

Quality checks and assessment of process functions as per site requirements, may include:

- roll density
- reel hardness
- bulk
- roll appearanceMD & CD tensiles

product identification

- stretch
- core slippage
  - core size
  - core strength
  - print quality core scenting

  - roll size

- damaged packaging
- colour matching
- sheet size
- cut quality
- packaged product
- · perforations

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#### Range Statement Cont.

#### Technology:

- · computer monitoring
- computer data entry and retrieval
- electronic, pneumatic and hydraulic process controls
- PLC controls

#### Communication channels:

- internal/external customers and suppliers
- maintenance services
- team members
- production/services co-ordinator

### Unit FPPFCO1A: Prepare Finishing/Converting Systems for Production

ELEMENTS	PERFORMANCE CRITERIA
FPPFCO1A.1 Establish production requirements.	<ul> <li>Product identification and customer specification is identified and confirmed.</li> <li>Product requirements are interpreted from documentation and supplies are confirmed available for production.</li> <li>Components and accessories are loaded/installed and set up for production.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPFCO1A.2 Inspect systems and process functions.	<ul> <li>All isolations are confirmed as signed off and lifted where applicable.</li> <li>Pre start checks are conducted on process systems and equipment as required.</li> <li>Operational maintenance requirements are undertaken in accordance with site agreements.</li> <li>Process adjustments are made to ensure production are met.</li> <li>Faults are identified and rectified as required according to SOP.</li> <li>Confirmation for start-up is communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPFCO1A.3 Implement area housekeeping.	<ul> <li>Potential hazards are removed to designated areas, in compliance with SOP.</li> <li>Chemical/hazardous materials are disposed of as required by enterprise SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> <li>Housekeeping/cleaning activities are conducted to ensure safe and clean work area.</li> </ul>

- Explains the purpose of finishing and converting processes and systems.
- Interprets documents.
- · Operate plant and equipment.
- Describes equipment/systems set-up procedures, adjustments and maintenance requirements.
- Interprets customer requirements and work instructions.
- Explains product types and quality requirements.
- · Uses inspection techniques.
- Employs effective written and verbal communication.
- Implements isolation/lockout procedures.
- Demonstrates consistent plant/equipment set up for product and/or process changes to operational specifications.
- Identifies and handles set-up problems.
- Maintains work area is maintained in a clean and hazard free condition.
- Inspects and maintains equipment/systems to specifications.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

## Unit FPPFCO2A: Monitor and Control Finishing/Converting Systems Operation

ELEMENTS	PERFORMANCE CRITERIA
FPPFCO2A.1 Operate and monitor processes.	<ul> <li>Equipment is started up and shut down in accordance with Standard Operating Procedures (SOP).</li> <li>Operations and systems are monitored and maintained within process specifications.</li> <li>Assessments and running inspections undertaken to confirm processes are within quality specification.</li> <li>Monitoring displays and devices are interpreted and responded to according to SOP.</li> <li>Operator level maintenance is carried out according to enterprise procedures.</li> <li>Process adjustments are made to ensure production specifications are met.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPFCO2A.2 Transfer product to customer.	<ul> <li>Product is transferred to next stage or customer, and is processed in accordance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPFCO2A.3 Record and report production data.	<ul> <li>Production log/tally is maintained as required.</li> <li>Machine/systems downtime is logged and resultant actions recorded.</li> <li>Appropriate customer identification is attached to product, when necessary.</li> </ul>

- Explains finishing/converting systems and processes.
- Explains start-up and shutdown procedures.
- Interprets customer requirements and work instructions.
- Explains product types and quality requirements.
- Explains plant and systems capabilities and limits.
- Operates and adjusts plant and equipment operation.
- · Describes cause and effect of adjustments.
- Explains types, function and purpose of alarms and monitoring devices.
- Explains causes and effects of system faults and rectification requirements.
- Uses visual inspection techniques.
- Uses computer/keyboard for data entry and retrieval.
- · Communicates effectively with individuals/teams.
- Operates equipment consistently to specifications and within enterprise time expectations.
- Maintains product quality.
- Minimises waste throughout production runs.
- Identifies and handles operating problems in accordance with SOP.
- Enters and extracts data from computers, where applicable.
- · Works harmoniously with other personnel.
- Maintains work area in a clean and hazard free condition.
- Inspects and maintains equipment/systems to specification.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **Unit FPPFCO3A: Package Product**

ELEMENTS	PERFORMANCE CRITERIA
FPPFCO3A.1 Pack and wrap product.	<ul> <li>Packaging and wrapping requirements are obtained and interpreted for customer order.</li> <li>Packing systems are prepared and operated in accordance with Standard Operating Procedures (SOP).</li> <li>Wrapping systems are prepared and operated in accordance with SOP.</li> <li>Operator level maintenance requirements are undertaken in accordance with SOP.</li> <li>Appropriate labelling/stencilling including customer specification and product identification is attached to product.</li> <li>Packaged products despatched to warehouse for shipment and/or storage.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices</li> </ul>

- · Describes manual transfer techniques/requirements
- Uses materials handling equipment.
- Maintains materials handling equipment.
- · Identifies product and customer specifications.
- Describes despatch procedures and responsibilities..
- Operates packaging and wrapping systems.
- Enters and retrieves data in reporting system.
- · Implements isolation and lockout procedures.
- Explains causes and effects of system faults and rectification requirements.
- Locates out-of-specification product to designated areas.
- Maintains despatch documentation according to requirements.
- Inspects/maintains equipment/systems to specification.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPFCO4A: Troubleshoot and Rectify Finishing and Converting Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPFCO4A.1 Identify and diagnose causes of systems and quality faults.	<ul> <li>Warning devices are interpreted to determine fault type and location.</li> <li>Quality assessments are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located.</li> <li>Relevant sources of historical data accessed/referred to, to confirm diagnosis of problems.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPFCO4A.2 Rectify systems faults.	<ul> <li>Emergency stop/shutdown, isolation and lockout SOP are initiated prior to fault rectification.</li> <li>Faulty equipment/instrumentation is identified and caused to be repaired or replaced in accordance with site agreements.</li> <li>Faulty equipment is by-passed in accordance with SOP, where the process allows it to occur.</li> <li>Corrective adjustments are made, and operational maintenance requirements are undertaken according to site agreements.</li> <li>Restoration of machine/system to normal operation is verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPFCO4A.3  Rectify/reproc ess product with quality faults.	<ul> <li>Product quality faults/variations are identified by observation, systematic sampling, testing or quality assessment procedures.</li> <li>Samples for a range of tests are taken, results are interpreted, and operations are adjusted to correct deviations from specification.</li> <li>Out of specification product is redirected for further testing and/or reprocessing.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPFCO4A.4 Record and report system performance and product quality data.	<ul> <li>Variations from specification of production and machine operation faults are documented/logged.</li> <li>Indications of performance variation are entered into log.</li> <li>Assessment and evaluation of causes of deviation, and corrective action undertaken is recorded as required.</li> <li>Relevant information is communicated to appropriate personnel to prepare for modification to the production run.</li> </ul>

- Explains systems, plant, and equipment operation.
- Explains finishing/converting systems and processes.
- Implements diagnostic and problem solving techniques.
- Interprets troubleshooting guides, operational data, trend analysis and test results.
- Uses data gathering and analysis skills.
- Uses logging and recording procedures.
- Operates communication equipment.
- · Uses key boarding and computer access skills.
- Identifies causes of faults are identified and responds appropriately.
- · Locates faults efficiently.
- Rectifies or causes to be rectified faults within site agreements.
- Implements isolation and lockout procedures in accordance with site agreements.
- Communicates with other personnel to assist with diagnosis and resolution of operational problems.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **Unit FPPFCO5A: Store Product**

ELEMENTS	PERFORMANCE CRITERIA
FPPFCO5A.1 Receive and load/unload product.	<ul> <li>Load/product documentation is received, interpreted and verified.</li> <li>Load and handling characteristics are identified in accordance with Standard Operating Procedures (SOP).</li> <li>Appropriate mechanical handling equipment is selected in compliance with SOP.</li> <li>Mechanical handling equipment is operated in accordance with enterprise SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPFCO5A.2 Store product.	<ul> <li>Load is lifted, carried and set down safely in accordance with SOP.</li> <li>Load is stored in compliance with enterprise stock location requirements.</li> <li>Product quality faults/variations are identified by observation, sampling, testing and quality assessment processes.</li> <li>Out of specification product is redirected for further testing and/or reprocessing.</li> <li>Housekeeping is completed in accordance with SOP.</li> <li>Inventory records documentation is completed in accordance with enterprise requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains warehouse organisation and workflow.
- · Operates materials handling equipment.
- · Identifies and rectifies storage problems/faults.
- Interprets documents.
- · Communicates effectively with individuals/teams.
- · Maintains materials handling equipment.
- Explains purposes for stock rotation of stored products.
- Uses technology to enter, access and retrieve information.
- Implements isolation and lockout procedures.
- · Maintains logs and records.
- Describes causes and effects of equipment/system faults and takes rectification action.
- Stores product in designated location.
- Maintains inventory system with up-to-date and accurate information.
- · Explains inventory systems.
- Explains storage systems and procedures.
- Stacks product correctly and in appropriate bays.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

## **Unit FPPFCO6A: Prepare and Despatch Product**

ELEMENTS	PERFORMANCE CRITERIA
FPPFCO6A.1 Pack product.	<ul> <li>Packaging requirements are interpreted from customer orders.</li> <li>Package identification/verification procedures are undertaken in accordance with Standard Operating Procedures (SOP).</li> <li>Goods are matched to and with correct labels, tags and stickers in accordance with enterprise requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPFCO6A.2 Despatch product.	<ul> <li>Customer order and specifications are interpreted.</li> <li>Goods are retrieved from storage area in compliance with SOP.</li> <li>Goods are loaded, despatched and documented according to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains warehouse organisation and workflow.
- · Operates materials handling equipment.
- Maintains materials handling equipment.
- Interprets customer order requirements.
- Selects product.
- · Packs/wraps product to customer requirements.
- Operates packaging/wrapping/labelling equipment.
- Describes despatch procedures and responsibilities.
- Communicates effectively with individuals/teams.
- Explains freight carrying and load restraints.
- Demonstrates keyboard skills.
- Maintains dispatch documentation according to requirements.
- Uses technology to access enter and retrieve information.
- Explains warehouse organisation and traffic flow systems.
- Explains freight carrying and load restraints.
- Secures loads safely.
- · Distributes loads to correct customers.
- Selects and packages product to customer requirements.
- · Identifies and rectifies faults in despatch processes.
- Maintains inventory systems with up-to-date accurate information.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

## **WATER SERVICES**

UNITS		
FPPWAS1A	Manage water system start-up.	
FPPWAS2A	Monitor, operate and control surface and ground water systems.	
FPPWAS3A	Monitor, operate and control irrigation and/or domestic water supply systems.	
FPPWAS4A	Monitor, operate and control raw water supply and distribution systems.	
FPPWAS5A	Monitor, operate and control wastewater treatment processes.	
FPPWAS6A	Construct water system assets.	
FPPWAS7A	Maintain water system assets.	
FPPWAS8A	Manage water system shutdown.	
FPPWAS9A	Troubleshoot and rectify water systems.	

### PLEASE NOTE:

A single Range Statement has been prepared to cover all Units in Water Services. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

domestic water system

water treatment systems

· water evaporation systems

· raw water systems

#### **RANGE STATEMENT**

The application of the competencies described in this unit may refer to:

- surface water systems
- ground water systems
- irrigation water systems
- · filtration systems
- water storage systems
- and may involve the following:
- major and minor catchment areas in both urban and rural locations
- extreme inflow rates, eg. flood conditions.

#### Materials/supplies:

- pipes, ie. vitrified clay, UPVC, polyethylene, reinforced concrete, vinyl iron
- · fittings, ie. jointing systems for pipes and prefabricated sections
- chemicals

#### **Equipment:**

- flow control and metering devices
- electronic and digital monitoring and metering systems
- manual chart recording systems
- chemical testing and analysis equipment FPPWAS5A]
- chemical spraying apparatus
- on and off road vehicle FPPWAS4A1
- basic hand and power tools
- communication equipment, eg. two way FPPWAS4A,FPPWAS5A] radios, phones and fax
- manual/hydraulic, pneumatic flow control and adjustment equipment FPPWAS5AI
- clarifiers and solids removal system
- chemical handling equipment
- hand and power tools
- de-bugging equipment

- pumping systems, eg. submersible centrifugal, multiple stage deep well
- valving systems, eg. sluice, blade, gate, non-return, pressure reducing
- small marine craft [excl. FPPWAS1A,
- wastewater treatment equipment and tanks [excludes FPPWAS2A,
- irrigation and domestic water equipment [excl.FPPWAS2A,
- raw water tanks and equipment
- surface and ground water tanks and equipment [excludes FPPWAS3A-
- · aeration ponds

#### Legislation, policy and procedures:

- · by laws, organisational policies
- environmental protection legislation and procedures
- · OH&S policies and procedures
- Australian Committee on Large Dams Guidelines (ANCOLD) [excludes FPPWAS1A, FPPWAS5A]
- Standard Operating Procedures (SOP)
- equipment operating licences
- water and chemical legislation and regulations
- safety instructions

#### Documentation/procedures/reports:

• as required by enterprise policies and statutory requirements

#### Maintenance:

- · as per site agreement
- maintenance systems

operator maintenance schedules

#### Sampling/testing:

- for example, sludge consistency, pH, conductivity, flocculation, colour, suspended solids
- sampling for legislative/regulatory requirements

## Technology:

- electronic monitoring and metering
- analysis and recording equipment

### Range Statement Cont.

### **Communication channels:**

- internal/external customers and suppliers
- statutory authorities maintenance services

- team member
- production/services co-ordinator

# Unit FPPWAS1A: Manage Water System Start-Up

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS1A.1 Conduct local inspections and pre-operational safety checks.	<ul> <li>Plant status and work requirements are determined.</li> <li>Operational pre-requisites are established in accordance with Standard Operating Procedures.</li> <li>Availability of supplies for water system is confirmed.</li> <li>Sequencing for plant start-up is determined in accordance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS1A.2 Initiate start-up procedures.	<ul> <li>Isolations are removed in accordance with SOP</li> <li>Water system is started up according to SOP.</li> <li>System/plant is observed for correct operational response.</li> <li>Variations from required operational conditions are detected and corrective action taken to rectify.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS1A.3 Implement area housekeeping and cleaning.	<ul> <li>Potential work area hazards are identified and reported.</li> <li>Prevention/control measures are employed.</li> <li>Chemical/hazardous materials are disposed in accordance with SOP</li> <li>Solid waste is disposed in accordance with SOP</li> <li>Routine documentation is maintained and logged in accordance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains start-up procedures for specified water system.
- Interprets documentation.
- · Explains system layout.
- · Interprets plans, charts and instructions.
- · Communicates with mill employees.
- Uses communication equipment effectively.
- Conducts and interprets test results.
- Uses technology effectively.
- · Identifies system start-up faults.
- Implements isolation/lockout procedures.
- · Operates water system plant and equipment.
- Maintains a clean and hazard free workplace.
- Implements confined space procedures.
- Implements solid waste disposal procedures.
- Prepares and initiates start-up according to operating requirements.
- Identifies, assesses and rectifies start up problems/faults and reports according to site requirements.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWAS2A: Monitor, Operate and Control Surface and Ground Water Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS2A.1 Monitor water quality and supply capabilities.	<ul> <li>Designated locations within the catchment area are inspected.</li> <li>Water samples are collected, tested, and recorded using standard procedures.</li> <li>Water capacity/flow measurements are taken to determine storage and usage.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPWAS2A.2 Inspect catchment/ surrounding areas.	<ul> <li>Potential risks to public/environment are identified and reported.</li> <li>Breaches of organisational/statutory legislation are identified and reported.</li> <li>Public complaints are investigated and action determined.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS2A.3 Monitor water flows.	<ul> <li>Inflow is calculated using standard flow rate calculations.</li> <li>Outflow is determined using standard flow rate calculations.</li> <li>Flow control settings are determined.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS2A.4 Conduct storage safety surveillance.	<ul> <li>Visual/electronic inspections are carried out.</li> <li>Metering devices are read to determine structure condition.</li> <li>Water levels are monitored and maintained as required.</li> <li>Communication with relevant concerned parties is conducted.</li> <li>Status is reported and recommendations made from information collected.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS2A.5 Regulate flows.	<ul> <li>Flow control mechanisms are regulated to maintain required system supply.</li> <li>Data relating to system demand adjustment is produced in accordance with organisational policy and statutory requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Explains system layout.
- Interprets plans, charts and instructions.
- Operates surface and ground water systems.
- · Communicates with mill employees.
- · Uses communication equipment effectively.
- · Conducts and interprets test results.
- Uses technology effectively.
- · Identifies system faults.
- Explains isolation/lockout procedures.
- Operates plant and equipment.
- Explains OH&S and environmental requirements.
- Calculates flow rates and expected water usage.
- Demonstrates ability to regulate water flow under normal and abnormal conditions.
- · Assesses water quality and determines storage and usage options.
- Identifies, assesses, rectifies and reports problems/faults to site requirements...
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWAS3A: Monitor, Operate and Control Irrigation and/or Domestic Water Supply Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS3A.1 Regulate irrigation/domestic water flows.	<ul> <li>Water levels are regulated to meet customer requirements.</li> <li>Flow regulation devices are operated to achieve required water levels.</li> <li>Flow regulation and measuring devices are inspected for correct operation and flow rate deliveries.</li> <li>Flow regulation devices are secured to meet enterprise/statutory requirements.</li> <li>Water filtration systems are checked to ensure operational to specification.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPWAS3A.2 Monitor system performance and usage.	<ul> <li>Designated areas to be inspected are identified/defined from enterprise plans and data.</li> <li>Routine inspection of work areas is conducted in accordance with SOP.</li> <li>Water levels are monitored and maintained as required.</li> <li>Operator level preventative maintenance schedules are carried out in accordance with enterprise procedures.</li> <li>Water samples are collected and tested using standard laboratory procedures.</li> <li>Reports are compiled from system performance data in accordance with enterprise/statutory requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS3A.3 Confirm licensing and legislation requirements.	<ul> <li>Routine inspections of private flow control or other diversion devices are conducted to monitor licence compliance.</li> <li>Water diversion times are co-ordinated and rostered in accordance with SOP.</li> <li>Volumes and flow rates pumped/diverted/delivered are monitored for licence compliance.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Explains system layout.
- Interprets plans, charts and instructions.
- · Operates irrigation and domestic water systems.
- · Communicates with relevant personnel.
- Uses communication equipment effectively.
- · Conducts and interprets test results.
- Uses technology effectively.
- · Identifies system faults.
- Explains isolation/lockout procedures.
- Operates water system plant and equipment.
- Calculates flow rates and expected water usage.
- Regulates water flow under normal and abnormal conditions.
- Assesses water quality and determines storage and usage options.
- Identifies, assesses, rectifies and reports problems/faults to site requirements.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWAS4A: Monitor, Operate and Control Raw Water Supply and Distribution Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS4A.1 Monitor systems' performance and usage.	<ul> <li>Routine inspections of supply networks are conducted and faults reported in accordance with organisational procedures.</li> <li>Operator level preventative maintenance schedules are carried out in accordance with enterprise procedures</li> <li>Data on system performance and usage is collected, analysed and reported in accordance with organisational requirements.</li> <li>Water levels are monitored and maintained as required.</li> <li>Water filtration systems are checked to ensure operational to specification.</li> <li>Water samples are collected and tested using standard procedures, and results recorded.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPWAS4A.2 Regulate raw water flow.	<ul> <li>Flow regulating systems are inspected and adjusted to meet demand requirements.</li> <li>Flows are regulated and diverted to facilitate repair or emergency activities.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS4A.3 Regulate raw water pressure.	<ul> <li>Pressures are monitored and, if required, adjusted to meet optimum delivery.</li> <li>Pressure fluctuations high/low outside acceptable limits are investigated and reported in accordance with organisational requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Explains system layout.
- Interprets plans, charts and instructions.
- Operates raw water systems.
- · Communicates with relevant personnel.
- · Uses communication equipment effectively.
- · Conducts and interprets test results.
- Uses technology effectively.
- · Identifies system faults.
- Explains isolation/lockout procedures.
- Operates water system plant and equipment.
- Calculates flow rates and expected water usage.
- Regulates water flow under normal and abnormal conditions.
- Assesses water quality and determines storage and usage options.
- Identifies, assesses, rectifies and reports problems/faults to site requirements.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWAS5A: Monitor, Operate and Control Wastewater Treatment Processes

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS5A.1 Monitor treatment plant performance.	<ul> <li>Routine plant inspections are carried out in accordance with enterprise and plant requirements.</li> <li>Water levels are monitored and maintained as required.</li> <li>Operator level preventative maintenance schedules are carried out in accordance with enterprise procedures</li> <li>Process tests are conducted and analysed, to determine plant operational requirements.</li> <li>Process data is collected, interpreted, recorded and reported in compliance with Standard Operating Procedures.</li> <li>Calculations are made to determine process performance.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS5A.2 Regulate wastewater flows.	<ul> <li>Flow regulating systems are inspected and adjusted to meet demand requirements.</li> <li>Flows are regulated and diverted to facilitate repair or emergency activities in accordance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS5A.3 Control chemical use.	<ul> <li>Chemicals are used, handled, and stored in accordance with enterprise and statutory requirements.</li> <li>Chemical dosing is prepared in compliance with plant processes and enterprise and statutory requirements.</li> <li>Information related to chemical supply and usage is maintained according to enterprise and statutory requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS5A.4 Operate and control wastewater processes.	<ul> <li>Processes are monitored to maintain parameters of operation.</li> <li>Process faults and operational condition of plant are identified and reported according to enterprise requirements and SOP.</li> <li>Basic system adjustments are initiated to enhance system performance in compliance with SOP.</li> <li>Plant and system performance reports are compiled according to enterprise and statutory requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Explains system layout.
- Interprets plans, charts and instructions.
- · Operates wastewater systems.
- · Communicates with relevant personnel.
- · Uses communication equipment effectively.
- · Conducts and interprets test results.
- Uses technology effectively.
- Explains causes and effects of system faults and rectification requirements.
- Explains isolation/lockout procedures.
- Operates water system plant and equipment.
- Calculates flow rates and expected water usage.
- Regulates water flow under normal and abnormal conditions.
- Assesses water quality and determines storage and usage options.
- Identifies, assesses, rectifies and reports problems/faults to site requirements.
- Maintains water quality within specifications.
- Identifies system faults
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWAS6A: Construct Water System Assets

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS6A.1 Prepare and restore work site.	<ul> <li>Worksite boundaries and requirements are determined from specifications and instructions.</li> <li>Water or other utility assets are located to prevent damage.</li> <li>Excavation and other worksite equipment is prepared for operation.</li> <li>Appropriate drainage/diversion of site inflows is provided from worksite without damage to the environment.</li> <li>Excavations are back filled and compacted where required in accordance with Standard Operating Procedures.</li> <li>Worksite is restored within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS6A.2 Construct channels, pipes and associated fittings.	<ul> <li>Channel bedding or foundation is laid according to specifications and statutory requirements.</li> <li>Appropriate pipes and fittings are laid/joined in compliance with statutory requirements.</li> <li>Prefabricated channel sections are placed and jointed in accordance with enterprise/statutory requirements.</li> <li>Earthen embankments are constructed to meet enterprise/statutory requirements.</li> <li>Installed pipes, fittings, prefabricated components and earthen embankments meet test specifications.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS6A.3 Install flow control and metering devices.	<ul> <li>Installation is prepared in accordance with specification requirements.</li> <li>Components are fitted to plans and specifications.</li> <li>Installations are completed and meet test specifications.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Explains system layout.
- Interprets plans, charts and instructions.
- Communicates with relevant personnel.
- · Uses communication equipment effectively.
- · Conducts and interprets test results.
- Uses technology effectively.
- · Identifies system faults.
- Explains isolation/lockout procedures.
- Operates water system plant and equipment.
- Conducts routine maintenance on plant and equipment as per site agreement.
- Explains the effect of weather conditions on site or plant.
- Prepares and restores worksite according to plans and instructions.
- Installs/constructs systems, plant and fittings to specifications.
- Installs water flow control and measuring devices to specifications.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

## **Unit FPPWAS7A: Maintain Water System Assets**

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS7A.1 Maintain channels, pipes and associated fittings.	<ul> <li>Inspections are conducted on a routine basis in accordance with enterprise programmed maintenance schedules.</li> <li>System chokes/blockages are located and removed from channels/pipelines to achieve maximum system performance.</li> <li>Leakages and/or damaged channels/pipes and fittings are repaired or replaced to specification, in accordance with Standard Operating Procedures.</li> <li>Operator level preventative maintenance schedules are carried out in accordance with enterprise procedures</li> <li>Cleaning of plant and surrounds is routinely carried out in compliance with enterprise and environmental requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> <li>Vegetation is identified, controlled and reported as required, in accordance with Australian standards, guidelines and enterprise policies.</li> <li>Chemicals are used, handled and stored as required, in compliance with relevant statutory requirements and enterprise SOP and policies.</li> </ul>
FPPWAS7A.2 Maintain flow control and metering devices.	<ul> <li>Service and minor maintenance of equipment is carried out in accordance with enterprise site agreements.</li> <li>Information relating to operation and maintenance of plant and equipment is accessed and interpreted.</li> <li>Plant service requirements are recorded and reported according to relevant SOP.</li> <li>Operator level preventative maintenance schedules are carried out in accordance with enterprise procedures</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- · Explains system layout.
- Interprets plans, charts and instructions.
- Communicates with relevant personnel.
- · Uses communication equipment effectively.
- · Conducts and interprets test results.
- Uses technology effectively.
- · Identifies system faults.
- Explains isolation/lockout procedures.
- Operates water system plant and equipment.
- Conducts routine maintenance on plant and equipment as per site agreement.
- Explains the effect of weather conditions on site or plant.
- Maintains systems, plant and fittings to operating requirements.
- Identified, assesses, rectifies and reports problems/faults to site requirements.
- Controls site vegetation in accordance with legislation and policies.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWAS8A: Manage Water System Shutdown

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS8A.1 Conduct a planned shutdown.	<ul> <li>Shutdown is planned within Standard Operating Procedures.</li> <li>Work plan is communicated with relevant personnel.</li> <li>Shutdown procedures are co-ordinated in accordance with SOP.</li> <li>Plant is left in a safe condition for access.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS8A.2 Manage an uncontrolled shutdown.	<ul> <li>Cause of shutdown is identified and isolated according to SOP.</li> <li>Safety of personnel is secured and confirmed in accordance with SOP.</li> <li>Shutdown of system or appropriate sections/plant is completed in accordance with SOP, and relevant personnel are notified.</li> <li>Plant is left in a safe condition for access.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains emergency procedures and responses.
- Implements shutdown procedures according to specific situations.
- Explains plant and machinery functions and operation.
- Co-ordinates and plans shutdown activity.
- Communicates clearly with relevant personnel.
- Explains the possible environmental effects of an emergency shutdown.
- Explains isolation/lock-out procedures.
- Conducts shutdown operations effectively and safely.
- Identifies, assesses, rectifies and reports shutdown problems/faults according to site procedures.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

# Unit FPPWAS9A: Troubleshoot and Rectify Water Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPWAS9A.1 Identify and diagnose causes of faults.	<ul> <li>Alarms are interpreted to determine fault type and location.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures.</li> <li>Relevant sources of data are accessed/referred to, to assist diagnosis.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPWAS9A.2 Rectify plant and equipment faults.	<ul> <li>Emergency stop/shut down, isolation and lockout procedures are in place prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated, repaired or replaced.</li> <li>Running adjustments and routine maintenance requirements are carried out.</li> <li>Plant and equipment are returned to normal operation.</li> <li>Verification is communicated to relevant personnel in compliance with relevant site agreements and work practices.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPWAS9A.3 Rectify product quality faults.	<ul> <li>Quality faults/variations are identified by observation, systematic sampling and testing.</li> <li>Samples for a range of tests are taken according to SOP.</li> <li>Test results are interpreted and operations adjusted to correct faults.</li> <li>Faults/causes are rectified if appropriate, or recommendations made for further action.</li> <li>Out-of-specification product is managed in accordance with SOP.</li> <li>Tests and test procedures comply with OH&amp;S and environmental requirements, and safe work practices.</li> </ul>
FPPWAS9A.4 Report system performance and product quality data.	<ul> <li>Variations from specification of product production and plant and equipment faults are documented/logged.</li> <li>Signs and symptoms of performance variation are entered into log.</li> <li>Assessment and evaluation of causes of deviation, and corrective action undertaken is recorded as required.</li> <li>Relevant information is communicated to appropriate personnel.</li> </ul>

- Identifies sources of instrument and operational data.
- Interprets relevant verbal and written information.
- Explains relevant systems, processes and functions.
- Identifies and implements in-process test requirements.
- Describes cause and effects of test results and actions.
- Explains impact of inappropriate responses.
- Explains product grade and process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- Identifies and implements operational procedures.
- Explains use and handling requirements of chemicals used; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- · Communicates effectively with relevant personnel.
- Demonstrates that emergencies/crash shutdowns are dealt with in accordance with SOP.
- Demonstrates that isolations and lockouts are conducted according to SOP.
- Demonstrates that relevant tests are conducted in accordance with SOP.
- Demonstrates that available data and test results are consistently interpreted and appropriate actions are selected and initiated.
- Demonstrates that grade specification/quality is consistently maintained or appropriate action taken.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

## **STEAM GENERATION**

	UNITS
FPPSTM1A	Manage steam boiler start-up.
FPPSTM2A	Monitor and control boiler operation.
FPPSTM3A	Shutdown and store steam boiler.
FPPSTM4A	Troubleshoot and rectify boiler plant system faults.

#### PLEASE NOTE

A single Range Statement has been prepared to cover all Units in Steam Generation. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### **RANGE STATEMENT**

The competencies described in this group of units relate to those functions inclusive of the following boiler types:

- fire tube
- water tube

- saturated boiler
- super heated

and may be operated in conjunction with other steam driven plant and operations including:

- paper making machines
- digesters

- turbines
- heating plant

#### Materials/supplies:

- chemicals
- oil
- additives
- water
- steam
- power

- coal
- gas
- air
- wood waste
- recovery process products

#### **Equipment:**

Equipment appropriate to steam generation processes and may include the following:

- fuel management system
- water distribution systems
- steam temperature control plant
- water treatment system
- hand and power tools

- boiler and auxiliary plant
  fuel and fuel delivery system plant
  fuel management systems
  dust removal and combustion waste extraction systems
  - compressed air systems
  - chemical dosing system
  - · flare detection equipment

#### Legislation, policy and procedures:

- OH&S
- environmental and statutory legislation
- enterprise policies and procedures
- Standard Operating Procedures (SOP)
- appropriate boiler/pressure vessel operator certification

#### Documentation/procedures/reports:

- SOP
- grade specifications
- maintenance logs
- Materials Safety Data Sheets (MSDS)
- process and instrument diagrams
- job sheets
- · manufacturer's specifications
- statutory requirements
- operator's log

#### Maintenance:

- · as per site agreement
- maintenance systems

- · maintenance schedules
- Sampling/testing: [excludes FPPSTM3A]
- feed water quality
- · assessments of process operations

#### **Technology:**

- · fully automated, semi automated, manually operated plant and equipment
- enter/extract computer data, electronic screens and alarms, analogue and digital instrumentation

#### **Communication channels:**

- internal/external customers and suppliers
- team members
- maintenance services

- statutory authorities
- maintenance/services co-ordinators

## Unit FPPSTM1A: Manage Steam Boiler Start-Up

ELEMENTS	PERFORMANCE CRITERIA
FPPSTM1A.1 Conduct pre- operational safety checks.	<ul> <li>Work/output requirements are established.</li> <li>Pre-operational and safety checks are conducted in accordance with Standard Operating Procedures.</li> <li>Availability of process supplies are confirmed.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM1A.2 Conduct start-up procedures.	<ul> <li>Isolations are removed in accordance with SOP.</li> <li>Pre-light conditions are established in accordance with SOP.</li> <li>Boiler is started and brought on-line according to SOP.</li> <li>System and plant is observed for correct operational response.</li> <li>Boiler condition during start-up is monitored to detect abnormal conditions.</li> <li>Deviations from required operating conditions are detected and corrective action undertaken to rectify.</li> <li>Responses to corrective actions are documented as required by SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM1A.3 Implement area housekeeping and cleaning.	<ul> <li>Potential work area hazards are identified and reported.</li> <li>Prevention/control measures are employed.</li> <li>Chemical/hazardous wastes are disposed in accordance with SOP.</li> <li>Solid waste disposal is in accordance with SOP.</li> <li>Routine documentation is maintained and logged in accordance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Implements isolation and access procedures.
- Interprets documentation.
- Describes plant layout and status identification.
- Explains purpose and operation of plant and systems.
- · Reads and interprets instruments, gauges and data recording equipment.
- Explains pre-operational checks and requirements.
- Starts up and operates boiler system.
- Reads and interprets specifications and customer orders.
- Reports and documents information.
- Uses effective verbal and written communication.
- Explains boiler water treatment system and reasons for treatment.
- Explains statutory responsibilities.
- Maintains a clean and hazard free work area.
- Implements confined space procedures.
- Complies with all OH&S requirements.
- Completes all pre-start checks and procedures.
- Demonstrates ability to consistently set-up and start boiler within specified time.
- Ensuring that handling and/or rectification of start-up problems comply with SOP or site agreements.
- · Maintains documentation requirements.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPSTM2A: Monitor and Control Boiler Operation

ELEMENTS	PERFORMANCE CRITERIA
FPPSTM2A.1 Confirm operational status.	<ul> <li>Continuing process supplies are maintained.</li> <li>Combustion processes are confirmed to be within operational specifications.</li> <li>Operational log confirms boiler performance parameters have been within specifications.</li> <li>Operational status is communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPSTM2A.2 Monitor and control boiler and ancillary plant operation.	<ul> <li>Operational status is confirmed by visual and audible observations, and process monitoring systems.</li> <li>Water quality tests are conducted according to SOP.</li> <li>Steam pressures are monitored and maintained as required.</li> <li>Fuel efficiency calculations/recordings are made in compliance with SOP.</li> <li>Boiler control adjustments are made in accordance with SOP to maintain operation within specification.</li> <li>Boiler water chemicals levels tested and adjusted as required by SOP.</li> <li>Make up pre-treatment systems for water to be monitored, tested and maintained as per SOP.</li> <li>Steam distribution systems are monitored and maintained to client requirements.</li> <li>Operator level maintenance is carried out according to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM2A.3 Place boiler in stand-by/banked/stored mode.	<ul> <li>Fuel and air supplies are shutdown according to SOP.</li> <li>Steam pressures and water condition and levels are maintained and monitored.</li> <li>Relevant personnel/customers are notified of system status in compliance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM2A.4 Record and document boiler and plant performance.	Operating log is maintained in accordance with SOP requirements.     Maintenance requirements are identified and documented.

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- Explains and implements isolation and access procedures.
- Describes plant layout and status identification.
- Explains purpose and operation of plant and systems.
- Reads and interprets instruments, gauges and data recording equipment.
- · Conducts pre-operational checks.
- · Starts up and operates boiler system.
- · Reads and interprets specifications and customer orders.
- · Reports and documents information.
- Uses effective verbal and written communication.
- · Explains boiler water treatment system and reasons for treatment.
- Explains statutory responsibilities.
- · Complies with all OH&S requirements.
- · Completes all pre-start checks and procedures.
- Sets-up and starts boiler within specified time.
- Handles and/or rectifies start-up problems in compliance with SOP or site agreements.
- Safely places boiler in standby mode, banked mode, stored mode, and status maintained in accordance with SOP.
- Maintains documentation requirements.
- Inspects and maintains boiler and auxiliary equipment and services to operating standards.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPSTM3A: Shutdown and Store Steam Boiler

ELEMENTS	PERFORMANCE CRITERIA
FPPSTM3A.1 Prepare boiler for controlled shutdown.	<ul> <li>Maintenance/rectification requirements are identified and reported in accordance with Standard Operating Procedures (SOP).</li> <li>Appropriate isolations/lock-outs are initiated.</li> <li>Boiler and ancillary plant are shutdown in compliance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM3A.2 Conduct boiler inspection/maintenan ce.	<ul> <li>Boiler is prepared for inspection in accordance with SOP.</li> <li>Condition of boiler is established to ensure safe removal of equipment.</li> <li>Hydrostatic test is conducted in accordance with SOP and monitoring requirements.</li> <li>Inspections and maintenance is carried out according to SOP and statutory requirements.</li> <li>Internal/external cleaning of boiler and fittings are undertaken.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM3A.3 Store boiler in shutdown mode.	<ul> <li>Storage time and condition of storage are established.</li> <li>Boiler is stored in a safe condition for access in accordance with manufacturer's specifications and SOP.</li> <li>Stored boiler water and chemicals are analysed and handled in accordance with SOP when boiler is stored for extended periods.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM3A.4 Respond to crash/emergency shutdowns.	<ul> <li>Crash is responded to immediately in accordance with SOP.</li> <li>Emergency conditions are complied with in accordance with legislative and enterprise procedures.</li> <li>Cause of crash is identified and located where possible.</li> <li>Immediate safety of personnel and plant is ensured in compliance with SOP.</li> <li>Continuing plant operation is monitored and maintained in safe working conditions and customers are notified.</li> <li>Relevant personnel are notified to rectify and make plant ready for restart.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains and implements isolation and access procedures.
- Describes plant layout and status identification.
- Explains purpose and operation of plant and systems.
- · Reads and interprets instruments, gauges and data recording equipment.
- Conducts pre-operational checks.
- Starts up and operates boiler system.
- Explains causes and effects of shutdowns.
- Describes shutdown responses and procedures.
- Implements boiler store/bank procedures.
- Reads and interprets specifications and customer orders.
- · Reports and documents information.
- Uses effective verbal and written communication.
- Explains boiler water treatment system and reasons for treatment.
- · Explains statutory responsibilities.
- Responds to shutdowns immediately and appropriately as per SOP.
- Maintains compliance with all OH&S requirements.
- Demonstrates ability to safely store/bank boiler, if applicable, and maintains status according to SOP.
- Boiler is consistently set-up and/or re-started within specified time.
- · Conducts all pre-start checks and procedures.
- Handles and/or rectifies start up problems in accordance with SOP or site agreements.
- · Maintains documentation requirements.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPSTM4A: Troubleshoot and Rectify Boiler Plant Systems

ELEMENTS	PERFORMANCE CRITERIA
FPPSTM4A.1 Identify and diagnose causes of faults.	<ul> <li>Plant assessments and system alarm systems are interpreted to determine fault type and location.</li> <li>Routine physical inspections of plant and processes are made to identify faults.</li> <li>Cause and source of problem is identified and located.</li> <li>Faulty plant is isolated, if possible, and confirmed with production and maintenance.</li> <li>Relevant historical data is accessed/referred to, to confirm diagnosis.</li> <li>Diagnoses are communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>
FPPSTM4A.2 Rectify systems/plant equipment faults.	<ul> <li>Emergency stop/shutdown, isolation and lock-out procedures are initiated prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated and caused to be repaired/replaced.</li> <li>Fine tuning adjustments to process and systems are made to return to specifications.</li> <li>Restoration of machine/system to normal operation is verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM4A.3 Rectify product quality and distribution faults.	<ul> <li>Product quality faults/variations are identified by observation, systematic sampling and testing.</li> <li>Samples for a range of tests are taken according to established enterprise procedures and SOP.</li> <li>Test results are interpreted and operations are adjusted to correct variations from specification.</li> <li>Out of specification product is dealt with according to SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPSTM4A.4 Record and report operational data.	<ul> <li>Variations from standard specification and machine operation faults are documented/logged.</li> <li>Indications of performance variance are entered into log.</li> <li>Assessment and evaluation of causes of variations and corrective action undertaken is recorded as required.</li> <li>Relevant information is communicated to appropriate personnel to prepare for modification to the plant output.</li> </ul>

- Explains types, causes and effects of plant shutdowns.
- Explains plant start-up and shutdown procedures.
- Describe plant operation and control mechanisms.
- Outlines impact and effect of inappropriate responses to shut.
- Explains causes and effects of system faults and rectification requirements.
- Implements troubleshooting guides and diagnostic procedures.
- Diagnoses production and quality faults, effects and causes.
- · Gathers, analyses and interprets data.
- Conducts routine checking procedures during plant/systems operation.
- Explains types and purpose of tests.
- · Sets up and operates test equipment.
- Explains sampling and testing procedures.
- Interprets test results.
- Logs and records data.
- · Demonstrates keyboarding and computer access skills.
- Uses effective communication.
- Explains boiler water treatment system and reasons for treatment.
- Explains statutory responsibilities.
- Identifies causes of shutdown and responds appropriately.
- Initiates isolations and lock-outs in compliance with SOP.
- Identifies, locates and rectifies or causes to be rectified operational and quality faults.
- Confirms and maintains required production throughput after restart.
- Maintains plant operation within specification.
- Communicates with appropriate personnel.
- Works within OH&S, SOP, environment and safe working requirements and practices.

### **ELECTRICAL POWER GENERATION**

UNITS	
FPPEPG1A	Manage a power generation system start-up.
FPPEPG2A	Monitor and control power generation system.
FPPEPG3A	Co-ordinate power generation system shutdown.
FPPEPG4A	Conduct a technical inspection of power generation plant and equipment.
FPPEPG5A	Troubleshoot and rectify power generation system.

#### **PLEASE NOTE:**

A single Range Statement has been prepared to cover all Units in Electrical Power Generation. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

#### **RANGE STATEMENT**

The competencies in this unit refer to those related to the management and operation of power generation and includes steam turbine driven alternators, auxiliary plant, electricity generation, regulation and distribution systems used in the pulp and paper making industry.

#### Materials/supplies:

- water
- steam
- electricity
- gas

#### **Equipment:**

Equipment appropriate to power generation processes, and may include the following:

- boilers
- steam/gas turbines
- water systems and auxiliary plant
- AC/DC generation and distribution systems
- measuring/recording equipment
- high and low voltage transformers and switchboards
- · circuit breakers
- · protective equipment

#### Legislation, policy and procedures:

- OH&S
- environmental and statutory legislation
- enterprise policies and procedures
- Standard Operating Procedures (SOP)
- appropriate endorsed operator licences
- local power authority policies and procedures

#### Documentation/procedures/reports:

- · operational logs/reports
- · maintenance logs
- SOP documentation
- Materials Safety Data Sheets (MSDS)
- Process and instrument diagrams

#### Maintenance:

- as per site agreement
- maintenance systems

• maintenance schedules

#### Sampling/testing:

- plant/system operations and process steam supply monitoring
- · as per site agreements

#### Technology:

- full and semi automated plant and equipment
- manually operated plant and equipment
- controlled systems PLC or DCS
- electronic measuring and monitoring equipment

#### Communication channels:

- internal/external suppliers and customers
- maintenance services
- team members
- product/services co-ordinator

# Unit FPPEPG1A: Manage a Power Generation System Start-Up

ELEMENTS	PERFORMANCE CRITERIA
FPPEPG1A.1 Conduct local inspections and preoperational safety checks.	<ul> <li>Plant status and work requirements are determined in conjunction with power authorities.</li> <li>Operational prerequisites are established in accordance with Standard Operating Procedures.</li> <li>Sequencing for plant start-up to suit current circumstances is determined in accordance with SOP.</li> <li>Operational maintenance requirements are undertaken in accordance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPEPG1A.2 Initiate start-up procedures.	<ul> <li>Sequence for start-up of plant is commenced in compliance with SOP.</li> <li>Generation system start is co-ordinated with distribution and ancillary systems and brought on-line according to SOP.</li> <li>System/plant is observed for correct operational response.</li> <li>Super heater or steam drains are monitored to ensure Environmental Protection Authority (EPA) noise compliance.</li> <li>Variations from required operational conditions are detected and corrective action taken to rectify.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPEPG1A.3 Implement area housekeeping and cleaning.	<ul> <li>Potential work area hazards are identified and reported.</li> <li>Prevention/control measures are employed to contain hazards.</li> <li>Routine documentation is maintained and logged in accordance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains plant and equipment operation.
- Describes AC/DC generation principles.
- Describes output control/regulation principles.
- Outlines power factor characteristics, effects and correction techniques.
- Explains electrical isolation procedures.
- Explains principles of operation of transformers and circuit protection systems.
- Describes power distribution systems.
- Explains power systems testing and test procedures.
- Uses tools and equipment.
- Explains environmental impact requirements.
- Diagnoses systems faults, causes and effects.
- Applies problem-solving principles.
- Uses effective communication skills.
- Explain the effect of steam quality on turbine operation.
- Explain the paralleling procedure and identify problems with failing to come into parallel.
- Maintains a clean and hazard free workplace.
- Starts up plant in accordance with SOP.
- Parallels alternator output successfully with existing internal and external supply grids.
- Conducts appropriate adjustments to maintain operation at required levels.
- Communicates with customers and other relevant personnel.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPEPG2A: Monitor and Control Power Generation System

ELEMENTS	PERFORMANCE CRITERIA
FPPEPG2A.1 Confirm operational status.	<ul> <li>Continuing process supplies are maintained.</li> <li>Power generation processes are confirmed to be within operational specifications.</li> <li>Operational log confirms turbine performance parameters have been within specifications.</li> <li>Operational status is communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPEPG2A.2 Control power generation and ancillary plant operation.	<ul> <li>Power generation plant and equipment is operated and monitored in accordance with manufacturer specifications and SOP.</li> <li>Process supplies are monitored according to SOP.</li> <li>Operational status is confirmed by visual and audible observations and process monitoring systems.</li> <li>Turbine and generation control adjustments are made to maintain operation within specification.</li> <li>Power output demand and distribution systems operation is monitored and maintained to meet client requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPEPG2A.3 Record and document turbine and generation plant performance.	<ul> <li>Turbine pressures and temperatures and flows are measured and recorded in accordance with SOP.</li> <li>Operating log is maintained in accordance with enterprise requirements.</li> <li>Maintenance requirements are identified and documented.</li> </ul>

- Explains plant and equipment operation.
- Describes AC/DC generation principles.
- Describes output control/regulation principles.
- Outlines power factor characteristics, effects and correction techniques.
- Explains electrical isolation procedures.
- Explains principles of operation of transformers and circuit protection systems.
- Describes power distribution systems.
- Explains power systems testing and test procedures.
- · Uses tools and equipment.
- Explains environmental impact requirements.
- Explains causes and effects of system faults and rectification requirements.
- · Applies problem-solving principles.
- · Uses effective communication skills.
- Explain the effect of steam quality on turbine operation.
- Maintains a clean and hazard free workplace.
- Starts up plant in accordance with SOP.
- Parallels alternator output successfully with existing internal and external supply grids.
- · Responds appropriately to monitoring and warning devices.
- · Conducts appropriate adjustments to maintain operation at required levels.
- Communicates with customers and other relevant personnel.
- Diagnoses system faults, causes and effects.
- Works harmoniously with other personnel.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPEPG3A: Co-ordinate Power Generation System Shutdown

ELEMENTS	PERFORMANCE CRITERIA
FPPEPG3A.1 Establish and/or assess cause and effect of malfunction/shutdown	<ul> <li>Planned shutdown is established from work area instructions or maintenance schedules.</li> <li>Abnormal operating conditions are identified by analysis of technical and operational information and other diagnostic procedures.</li> <li>Effects of abnormal conditions are determined to enable appropriate action to be taken in accordance with Standard Operating Procedures.</li> <li>Source of shutdown cause is located to ensure rectification in accordance with SOP.</li> <li>Faulty plant is isolated/contained where possible to allow continued production.</li> <li>Appropriate personnel and local authorities are notified when abnormal operating conditions prevail.</li> <li>Safety issues are identified to ensure compliance with SOP.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPEPG3A.2 Implement shutdown procedures.	<ul> <li>Isolation/lock-out requirements are implemented according to SOP.</li> <li>Process supplies shutdown procedures are followed as required.</li> <li>Plant/system shutdown is managed in accordance with relevant procedures.</li> <li>Plant integrity/personnel safety is ensured in compliance with SOP.</li> <li>Shutdown information is communicated to relevant personnel as required.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPEPG3A.3 Record and report shutdown data.	<ul> <li>Planned/crash shutdown data is entered/logged as required by SOP.</li> <li>Assessments and evaluations of causes and corrective actions undertaken is recorded as required.</li> <li>Relevant information is communicated to appropriate personnel in accordance with operational requirements.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPEPG3A.4 Respond to crash/emergency shutdowns.	<ul> <li>Crash is responded to immediately in accordance with SOP.</li> <li>Emergency conditions are complied with in accordance with legislative and enterprise requirements.</li> <li>Cause of crash is identified and located where possible.</li> <li>Immediate safety of personnel and plant is ensured in compliance with SOP.</li> <li>Continuing plant/systems operation is monitored and maintained in safe working conditions and customers are notified.</li> <li>Relevant personnel are notified to rectify and make plant ready for restart.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Explains plant and equipment operation.
- Describes AC/DC generation principles.
- Describes output control/regulation principles.
- Outlines power factor characteristics, effects and correction techniques.
- Explains electrical isolation procedures.
- Explains principles of operation of transformers and circuit protection systems.
- Describes power distribution systems.
- Explains power systems testing and test procedures.
- Uses tools and equipment.
- Explains environmental impact requirements.
- Diagnoses systems faults, causes and effects.
- Applies problem-solving principles.
- Uses effective communication skills.
- Explain the effect of steam quality on turbine operation.
- Describes the post shutdown operation.
- Maintains a clean and hazard free work area.
- Starts up plant in accordance with SOP.
- Parallels alternator output successfully with existing internal and external supply grids.
- Responds appropriately to monitoring and warning devices.
- Conducts appropriate adjustments to maintain operation at required levels.
- Communicates with customers and other relevant personnel.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPEPG4A: Conduct a Technical Inspection of Power Generation Plant and Equipment

ELEMENTS	PERFORMANCE CRITERIA
FPPEPG4A.1 Prepare for plant inspection/test.	<ul> <li>Plant inspection outcomes defined in accordance with available options.</li> <li>Potential causes of faulty plant operation identified.</li> <li>Relevant maintenance and operational data is consulted.</li> <li>Isolations, lock-out procedures are initiated in accordance with Standard Operating Procedures and relevant OH&amp;S requirements.</li> </ul>
FPPEPG4A.2 Conduct plant inspection/test.	<ul> <li>Plant for inspection is correctly identified and operational status established.</li> <li>Inspections are conducted in accordance with SOP.</li> <li>Plant is left in a safe condition and its status is declared at completion of inspection/test.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPEPG4A.3 Evaluate and report inspection/test findings.	<ul> <li>Inspection/test results and data are analysed according to SOP.</li> <li>Potential options and recommendations for action are prepared and documented as required.</li> <li>Action plan for remedial action is prepared and communicated to relevant personnel.</li> <li>Relevant records and documentation are completed in compliance with statutory and enterprise requirements.</li> </ul>

- Explains plant and equipment operation.
- Describes AC/DC generation principles.
- Describes output control/regulation principles.
- Outlines power factor characteristics, effects and correction techniques.
- · Explains electrical isolation procedures.
- Explains principles of operation of transformers and circuit protection systems.
- Describes power distribution systems.
- Explains power systems testing and test procedures.
- · Uses tools and equipment.
- Explains environmental impact requirements.
- Diagnoses systems faults, causes and effects.
- · Applies problem-solving principles.
- · Uses effective communication skills.
- Explain the effect of steam quality on turbine operation.
- Describes operational tolerances of the turbine system and the effect of operating outside these tolerances.
- Maintains a clean and hazard free work area.
- · Conducts inspections within statutory requirements and in compliance with SOP.
- · Completes inspection documentation according to SOP.
- · Starts up plant in accordance with SOP.
- Parallels alternator output successfully with existing internal and external supply grids.
- Responds appropriately to monitoring and warning devices.
- Conducts appropriate adjustments to maintain operation at required levels.
- Communicates with customers and other relevant personnel.
- Works within OH&S, SOP, environment and safe working requirements and practices.

# Unit FPPEPG5A: Troubleshoot and Rectify Power Generation System

ELEMENTS	PERFORMANCE CRITERIA
FPPEPG5A.1 Identify and diagnose causes of faults.	<ul> <li>Visual assessments and system alarm systems are interpreted to determine fault type and location.</li> <li>Routine physical inspections of plant and processes are made to identify faults.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures.</li> <li>Relevant historical data accessed/referred to, to confirm diagnosis.</li> <li>Diagnoses are communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
FPPEPG5A.2 Rectify systems/plant equipment faults.	<ul> <li>Emergency stop/shutdown, isolation and lock-out procedures are initiated prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated and repaired/replaced.</li> <li>Corrective adjustments and maintenance requirements to machinery/systems operation are made following restoration.</li> <li>Restoration of machine/system to normal operation is verified and communicated to relevant personnel.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPEPG5A.3 Rectify power quality and distribution faults.	<ul> <li>Power quality faults/variations are identified by observation, systematic sampling and testing.</li> <li>Measurements are taken and tests conducted according to established enterprise procedures and SOP.</li> <li>Power quality is adjusted whilst generator is on-line to correct variations from specification.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPEPG5A.4 Record and report operational data.	<ul> <li>Variations from required production output and systems operation faults are documented/logged.</li> <li>Indications of performance variation are entered in log.</li> <li>Assessment and evaluation of causes of variations, and corrective action undertaken is recorded as required.</li> <li>Relevant information is communicated to appropriate personnel to prepare for modification to the production run.</li> </ul>

- Explains types, causes and effects of power generation plant shutdowns.
- Explains plant and equipment operation.
- Describes AC/DC generation principles.
- Describes output control/regulation principles.
- Outlines power factor characteristics, effects and correction techniques.
- · Explains electrical isolation procedures.
- Explains principles of operation of transformers and circuit protection systems.
- · Describes power distribution systems.
- Explains power systems testing and test procedures.
- Uses tools and equipment.
- Explains causes and effects of system faults and rectification requirements.
- Implements troubleshooting guides and diagnostic procedures.
- Explains environmental impact requirements.
- Diagnoses production and quality faults, causes and effects.
- Gathers, analyses and interprets data.
- Conducts routine checking procedures during plant/systems operation.
- Describes types and purpose of tests.
- · Sets up and operates test equipment.
- Describes sampling and testing procedures.
- · Applies problem-solving principles.
- · Uses effective communication skills.
- Explain the effect of steam quality on turbine operation.
- Describes operational tolerances of the turbine system and the effect of operating outside these tolerances.
- Maintains a safe and hazard free workplace.
- Identified and rectifies or causes to be rectified, power generation faults, in accordance with site agreements.
- Identifies and responds appropriately to shutdown causes.
- Initiates isolations and lock-outs in compliance with SOP.
- Identifies, locates and rectifies, or causes to be rectified operational and quality faults/causes with minimal delay to production, in accordance with site agreements.
- Maintains required power outputs consistently to specification.
- · Maintains plant operation consistently to specification.
- · Communicates with appropriate personnel.
- Works within OH&S, SOP, environment and safe working requirements and practices.

### **CHEMICAL PREPARATION**

UNITS			
FPPCPR1A	Prepare chemicals		

#### **RANGE STATEMENT**

The competencies for this unit relate to those systems and functions involved in preparing chemicals.

#### Materials/supplies:

- water
- chemicals

#### **Equipment:**

· chemical production equipment

#### Legislation, policy and procedures:

- enterprise policy, procedures and guidelines
- OH&S and environmental regulatory requirements (state and commonwealth)
- quality assurance requirements
- Standard Operating Procedures (SOP)

#### **Documentation/procedures/reports:**

- Material Safety Data Sheets (MSDS)
- Standard Operating Procedures (SOP)

#### Maintenance:

- as per site agreement
- operator maintenance schedules
- · maintenance systems

#### Sampling/testing/quality checks:

• as per chemical manufacturers specifications

#### Technology:

· process control and monitoring equipment, input and extract data

#### **Communication channels:**

- production sections
- service sections
- team members

- maintenance services
- supervisors
- chemical suppliers

## **Unit FPPCPR1A: Prepare Chemicals**

ELEMENTS	PERFORMANCE CRITERIA
FPPCPR1A.1 Establish Chemical Requirements	<ul> <li>Chemical requirements are determined and their delivery systems set for operation.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPCPR1A.2 Inspect and prepare chemical systems	<ul> <li>Isolations are removed according to SOP.</li> <li>All power supplies are determined to be operationally ready to commence production.</li> <li>Appropriate systems are closed and/or activated for production.</li> <li>Work is completed with OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPCPR1A.3 Monitor and maintain chemical system	<ul> <li>Additives are mixed to required specifications.</li> <li>Quality checks are conducted as per SOP.</li> <li>Process adjustments are made to ensure product quality.</li> <li>Documentation is maintained to enterprise requirements.</li> <li>Faulty equipment is identified and repaired/replaced according to SOP</li> <li>Work is completed with OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPCPR1A.4 Implement shutdown procedures	<ul> <li>Shutdown is managed, planned, organised and responded to according to type of shutdown.</li> <li>Work is completed with OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPCPR1A.5 Implement area housekeeping requirements	<ul> <li>Routine checks and maintenance of work area are undertaken.</li> <li>Housekeeping/cleaning activities are conducted to ensure a safe and clean work area.</li> <li>Potential waste hazards are removed to designated areas, in compliance with SOP.</li> <li>Chemical/hazardous materials are disposed of as required by SOP.</li> <li>Work is completed with OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Interprets documentation.
- Explains chemical preparation processes and systems.
- Identifies the process controls within the system.
- · Plans work within standard procedures.
- Explains and implements OH&S standards.
- Communicates information clearly to internal and external contacts.
- Accesses and interprets computer information.
- Collects and collates information for decision-making.
- Demonstrates the ability to prepare chemical system.
- Maintains a clear and hazard free work area.
- Describes cause and affects of operational equipment faults and takes appropriate rectification action.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **COMMUNICATION**

#### UNITS

**FPPCOM1A** Use basic workplace communication.

**FPPCOM2A** Prepare and present verbal and written workplace information.

**FPPCOM3A** Use advanced workplace communication.

**FPPCOM4A** Engage in complex workplace communication.

#### **RANGE STATEMENT**

#### Company policy and procedures may include:

- OH&S
- quality assurance
- Standard Operating Procedures (SOP)
- environmental
- · workplace agreements

### Communication may be with people from a range of social, cultural and ethical backgrounds who are:

- · team members
- peers
- management

#### Types of text may include:

- single words
- · short sentences
- symbols
- codes
- signs
- sketches

#### Text may be conveyed in:

- · printed form
- screen based form

#### Language may be:

- everyday workplace use
- technical terms

### Negotiation of issues is conducted in a supportive environment with assistance from others such as:

- team leader
- · shop steward
- management

Personal notes may be kept in style and language appropriate to individual.

#### Types of documents may include:

- · work reports
- personal employment forms
- Material Safety Data Sheets (MSDS)
- · work instructions
- manuals

#### Recording may be by using:

- symbols
- short sentences
- · computer system

## Unit FPPCOM1A: Use Basic Workplace Communication

ELEMENTS	PERFORMANCE CRITERIA
FPPCOM1A.1 Exchange verbal information.	<ul> <li>Verbal information is exchanged in order to outline routine work requirements.</li> <li>Questions are asked to seek clarification.</li> <li>Group processes are followed to respond to work related questions.</li> </ul>
FPPCOM1A.2 Locate and use written information.	Text is located and used to identify routine work information.
FPPCOM1A.3 Record routine data and personal notes.	<ul> <li>Routine data is recorded on standard forms.</li> <li>Notes of discussions are recorded for use as a personal reference.</li> </ul>

- Outlines own job tasks and responsibilities.
- Repeats and explains day to day workplace information such as work instructions.
- · Explains acceptable behaviour.
- · Explains the consequences of not following acceptable workplace behaviour.
- Describes basic employment conditions.
- Describes areas covered by industrial awards.
- Describes company policies and procedures and how they relate to own job.
- Uses pronunciation that is clear and intelligible.
- Identifies information requirements and formulates questions to clarify work requirements or instructions.
- Expresses opinions in response to questions to contribute to problem solving processes.
- Demonstrates group processes such as turn-taking, participating in discussions and tolerating views of others in a way that contributes to the overall goal of the group.
- Indicates the usual source(s) of written information relevant to implementing work responsibilities.
- · Explains the purpose of the text.
- Uses text to identify required information.
- Locates and explains the purpose of forms.
- Records information in a manner which is complete, accurate and legible.
- Prepares notes of discussion so that they can be clearly interpreted by the writer.

## Unit FPPCOM2A: Present Verbal and Written Workplace Information

ELEMENTS	PERFORMANCE CRITERIA
FPPCOM2A.1 Select and present verbal information.	<ul> <li>Issues are presented, discussed and negotiated in order to meet work requirements.</li> <li>Verbal information is selected, structured and presented to convey meaning to others.</li> <li>Group processes are followed to assist group objectives.</li> </ul>
FPPCOM2A.2 Read routine instructions and reports.	Routine written instructions and reports in standard format are used to assist person to complete work functions/tasks.
FPPCOM2A.3 Prepare brief written statements.	<ul> <li>Brief written documents in standard format are prepared to communicate information regarding the person's immediate work responsibilities.</li> <li>Information is prepared for personal use or use in immediate workplace.</li> </ul>

- Explains immediate work related issues or problems.
- Outlines personal views on work related issues.
- Seeks views of others in order to discuss processes and options for improvements relating to own job and immediate work environment.
- Uses appropriate sequence and order of information to convey meaning.
- Explains the object of group or team-based processes.
- Locates and extracts relevant information from routine workplace text.
- Explains the message conveyed in minutes and ad hoc notes recording group activity.
- Organises information and prepares brief routine reports to explain workplace information.

## Unit FPPCOM3A: Use Advanced Workplace Communication

ELEMENTS	PERFORMANCE CRITERIA
FPPCOM3A.1 Express views verbally.	<ul> <li>Sensitive issues are discussed and negotiated in an appropriate manner.</li> <li>Information gathering techniques are used to identify views of others.</li> <li>Views and ideas of others are accurately represented.</li> <li>Information is reported back.</li> <li>Group processes are followed.</li> </ul>
FPPCOM3A.2 Read non-routine text.	Written information is used to co-ordinate, prepare and monitor workplace performance.
FPPCOM3A.3 Prepare written information to support groups and teams.	Written information associated with group activities is prepared in standard format in language understood by the receiver.

- Ascertains views of others by asking questions or convening small group discussions.
- Summarises views of others to retain key points and reports back.
- Contributes to participative processes.
- Uses appropriate language and sensitivity when considering and discussing sensitive issues, eg. skill assessments, sexual harassment complaints, etc.
- States the purpose of range of documentation used in person's work area.
- Summarises information in reports.
- · Prepares agenda in standard format.
- Prepares minutes so that they accurately and succinctly record the business of the meeting.

## Unit FPPCOM4A: Engages in Complex Workplace Communication

ELEMENTS	PERFORMANCE CRITERIA
FPPCOM4A.1 Engage in complex verbal communication.	<ul> <li>Group processes are facilitated and monitored to support group objectives.</li> <li>One-to-one counselling of team members is provided to provide effective support.</li> <li>Work instructions and expectations are negotiated with others.</li> </ul>
FPPCOM4A.2 Read complex text.	<ul> <li>Written information is read, analysed and used to assist person to oversee workplace performance.</li> <li>Technical information from written source is used to examine and introduce new procedure and approaches to improve workplace performance.</li> </ul>
FPPCOM4A.3 Prepare written information for a range of audiences and applications.	<ul> <li>Routine and specialist reports are consolidated and summarised to convey key points.</li> <li>Procedures and instructions related to existing and new functions/tasks are written for others to follow and implement.</li> </ul>

- Uses facilitation skills to ensure participation from all group members.
- · Demonstrates conflict resolution techniques.
- Demonstrates participative problem-solving techniques to resolve workplace problems.
- Resolves or progresses issues in complex and/or hostile environments.
- Conveys information which may be complex or technical or involves a change to a familiar process, to people who may not have a technical background.
- Conveys workplace information such as work instructions, in a way that facilitates learning by others.
- Counsels team members on work and related matters affecting work performance.
- Outlines the roles and expectations of customers, suppliers and participants in the work process.
- Demonstrates techniques to check that information has been understood.
- Explains and demonstrates communication styles relevant to conveying information to employees from a range of social, cultural and ethnic backgrounds.
- Locates and extracts relevant information from technical documentation.
- Analyses written information from a variety of sources to assist with decision-making process.
- Explains the purpose of the reports and other documentation used in the work area.
- Collects and organises data to present information which may be drawn from a range of sources.
- Writes information legibly and in a style which is understood by the receiver.

### **COMPUTER SKILLS**

#### UNITS

**FPPCSK1A** Access and modify computer records and documents.

**FPPCSK2A** Access mainframe system.

#### RANGE STATEMENT

#### Types of computer information and activities may include:

- maintenance of enterprise records
- tracking of jobs/orders through an enterprise
- accessing of production and quality information
- using and modifying inventories

Variety of systems, computers and software available.

## Unit FPPCSK1A: Access and Modify Computer Records and Documents

ELEMENTS	PERFORMANCE CRITERIA
FPPCSK1A.1 Edit organisational records and documents.	<ul> <li>Computer is turned on in correct manner.</li> <li>Appropriate software is loaded or selected from menu.</li> <li>File(s) are correctly identified and opened.</li> <li>Information to be edited is identified.</li> <li>Information is entered, changed or deleted using appropriate input device(s) (keyboard, mouse, joystick, etc.).</li> <li>Document is saved regularly to avoid loss of data.</li> <li>Document is printed as required.</li> <li>Edited information is checked against original for accuracy of contents.</li> <li>Edited document or record is saved.</li> <li>Back-up copies are created and stored in accordance with specified procedures.</li> <li>Files are closed and programs exited in accordance with specified procedures.</li> </ul>
FPPCSK1A.2 Produce documentation to required specifications.	<ul> <li>Software selected is appropriate to task.</li> <li>Structure and style of document is checked to ensure it is suitable for information being inserted.</li> <li>Information is entered and edited accurately.</li> <li>Range of functions is used to ensure efficient and accurate completion of task within nominated deadlines.</li> <li>Information from other documents is inserted as required.</li> <li>Documents are printed and proofread for accuracy and consistency of layout and style.</li> <li>Documents are presented to designated person/section for approval prior to completion and/or final printing.</li> <li>Modifications are made to meet required specifications.</li> </ul>

- Demonstrates basic keyboard skills.
- Demonstrates familiarity with general principles of computer use.
- Produces simple or previously structured documents.
- Accesses, edits and saves information.

## Unit FPPCSK2A: Access Mainframe System

ELEMENTS	PERFORMANCE CRITERIA
FPPCSK2A.1 Access, enter and extract information.	<ul> <li>Computer program is accessed in the correct manner.</li> <li>Information is entered, changed or deleted as appropriate.</li> <li>Required screen/information is accessed.</li> <li>Screens and programs are exited in accordance with specified procedures.</li> </ul>

- Demonstrates ability to access and exit mainframe system.
- Explains how to enter, change and delete information.
- Explains the effect on the system of incorrect operation.

### **EMERGENCY PROCEDURES**

#### UNITS

**FPPEME1A** Prepare equipment for an emergency response.

**FPPEME2A** Respond to an emergency situation.

#### **RANGE STATEMENT**

#### **Emergencies may include:**

- fire
- · chemical or oil spill
- gas leak or vapour emission
- utilities failure.

#### Resources:

- · personal protective equipment
- emergency response equipment
- SOP
- emergency services police, fire, ambulance.
- · material safety data sheets

#### Indicative functions include:

- inspection
  - visual
  - mechanical checks
- containment of
  - fire
  - spillage
  - leaks
- servicing
  - lubrication
  - pressure checks
  - refilling.
- communication
  - maintenance
  - external authorities
- first aid
  - application of procedures

#### **Equipment may include:**

- fire extinguishers
- hoses
- pumps
- branches fittings/nozzles
- · personal protective clothing and equipment
- breathing apparatus
- deluge/safety showers.

### Unit FPPEME1A: Prepare Equipment for an Emergency Response

ELEMENTS	PERFORMANCE CRITERIA
FPPEME1A.1 Identify emergency equipment.	<ul><li>Location of emergency equipment is determined.</li><li>Access to emergency equipment is ensured.</li></ul>
FPPEME1A.2 Inspect and assemble emergency equipment.	<ul> <li>Emergency equipment is inspected for faults or damage.</li> <li>Couplings/connections and operational status are determined and secured.</li> <li>Equipment is assembled in accordance with manufacturer's specifications.</li> <li>Missing or damaged parts are identified and reported in accordance with standard procedures.</li> </ul>
FPPEME1A.3 Carry out minor servicing of equipment.	<ul> <li>Equipment is cleaned and maintained according to specifications/standard procedures.</li> <li>Servicing is carried out according to specifications/standard procedures.</li> <li>Equipment is "made ready" and stored in designated location.</li> <li>Equipment functions according to specifications.</li> </ul>
FPPEME1A.4 Report and record emergency information.	<ul> <li>Equipment status is recorded and reported in accordance with standard procedures.</li> <li>Maintenance requests are raised as appropriate.</li> <li>Corrective action is undertaken and followed up as appropriate.</li> </ul>

- Explains the location of emergency response equipment.
- Demonstrates ability to test emergency response equipment.
- Identifies faulty emergency response equipment.
- Conducts routine maintenance on emergency response equipment.
- Maintains emergency response equipment inventory.

## Unit FPPEME2A: Respond to an Emergency Situation

ELEMENTS	PERFORMANCE CRITERIA
FPPEME2A.1 Identify emergency situation.	<ul> <li>Nature, location and scope of emergency is assessed and communicated.</li> <li>Alarms are raise din accordance with standard procedures.</li> <li>Emergency equipment is located and utilised.</li> </ul>
FPPEME2A.2 Assess appropriate level of response.	<ul> <li>Hazard information systems are accessed as appropriate.</li> <li>Familiarity with emergency procedures is demonstrated.</li> <li>Frequency/duration/actual and potential outcome is assessed.</li> </ul>
FPPEME2A.3 Notify responsible authorities.	<ul> <li>Emergency reporting procedures are followed.</li> <li>Appropriate authorities are identified and notified.</li> <li>Communication regarding the emergency is clear and unambiguous.</li> </ul>
FPPEME2A.4 Minimise effect of the emergency.	<ul> <li>Emergency response procedures are applied as appropriate.</li> <li>The area is cleared and secured as required.</li> <li>Emergency equipment is accessed and operated in accordance with SOP.</li> </ul>
FPPEME2A.5 Monitor emergency situation.	<ul> <li>Information is processed, recorded and communicated to appropriate personnel/authorities.</li> <li>Corrective action procedures are monitored.</li> <li>Changes in the situation are communicated to appropriate personnel/authorities.</li> </ul>
FPPEME2A.6 Participate in emergency review.	<ul> <li>Relevant information/documentation is assembled.</li> <li>Procedures are audited.</li> <li>Potential causes of the emergency are identified.</li> <li>Emergency response is evaluated.</li> <li>Revised emergency responses are recommended where appropriate.</li> </ul>

- Demonstrates ability to identify and respond appropriately to an emergency situation.
- Follows the company emergency procedures.
- Reviews emergency procedures and provides feedback to appropriate personnel.
- Provides guidance to others on how to respond in an emergency.
- Demonstrates ability to monitor and communicate changes in emergency situation.
- Explains procedures to ensure protection of workforce.
- Demonstrates ability to interpret documentation.

## **ENVIRONMENTAL MONITORING**

UNITS		
FPPENV1A	Identify and monitor environmental discharges/emissions.	
FPPENV2A	Monitor and control environmental hazards.	

#### **RANGE STATEMENT**

#### Indicative functions include:

- monitoring of all physical sensors, instrumentation, compliance with licensing arrangements
- · communication, using in-plant reporting systems.

#### Resources:

- containment equipment
- personal protective equipment
- monitoring equipment.

#### Legislation, policies and procedures:

- Occupational Health and Safety
- HAZCHEM
- · duty of care
- · dangerous goods
- external licensing requirements (for example, EPA, water authorities, local councils)
- · internal environmental control standards.

#### Emissions/discharges include:

- noise
- light
- odour
- gas
- smoke
- vapour
- liquid and solids
- particulates
- fumes.

## **Unit FPPENV1A: Identify and Monitor Environmental Discharges/Emissions**

ELEMENTS	PERFORMANCE CRITERIA
FPPENV1A.1 Monitor environmental discharges/emissions .	<ul> <li>Discharge/emission levels are recognised and described.</li> <li>Emission levels are monitored and measured in accordance with Standard Operating Procedures (SOP).</li> <li>The consequences of exceeding allowable emission levels are explained.</li> <li>Discharges and emissions are kept within targeted limits.</li> <li>Waste removal from site complies with internal and external regulations.</li> </ul>
FPPENV1A.2 Respond to abnormal environmental discharges/emissions	<ul> <li>Abnormal emissions are reported to appropriate personnel.</li> <li>Containment procedures are applied in accordance with SOP where appropriate.</li> <li>Correct safety procedures are followed and personal protective equipment utilised.</li> </ul>

- Identifies unacceptable environmental discharges.
- Explains environmental consequences of unacceptable discharges.
- Explains company policy related to environmental monitoring and control.
- · Explains the reporting system.
- Explains the role and responsibility of regulatory bodies.
- Demonstrates work practices within regulatory requirements.
- Explains the occupational health and safety implications of unacceptable control of environmental hazards.

## Unit FPPENV2A: Monitor and Control Environmental Hazards

ELEMENTS	PERFORMANCE CRITERIA
FPPENV2A.1 Identify environmental hazards.	<ul> <li>Environmental hazards are identified.</li> <li>Location and severity of hazard is assessed and communicated to appropriate personnel.</li> <li>Cause/source of environmental hazard is diagnosed.</li> </ul>
FPPENV2A.2 Respond to environmental hazard.	<ul> <li>Environmental alarms are activated where appropriate.</li> <li>Environmental hazard is measured and controlled in accordance with SOP.</li> <li>Hazardous incident is documented and reported in accordance with SOP.</li> </ul>
FPPENV2A.3 Liaise with internal and external bodies.	<ul> <li>Relevant licensing authorities/bodies are identified and notified in accordance with SOP.</li> <li>Status of the environmental hazard is monitored and communicated with appropriate personnel on an ongoing basis in accordance with SOP.</li> </ul>
FPPENV2A.4 Participate in investigation of environmental incident.	<ul> <li>Documentation and reports are completed in accordance with SOP.</li> <li>Investigations are undertaken in accordance with SOP.</li> <li>Findings are documented and reported in accordance with SOP.</li> </ul>

- Identifies and investigates reasons for environmental hazard.
- Explains company procedures for identifying, recording and reporting environmental hazards.
- Demonstrates ability to take emergency action associated with environmental hazard.
- Communicates with appropriate internal and external bodies.
- Demonstrates ability to use approved OH&S procedures and practices in dealing with environmental hazards.

### FIRST AID

FPPAID1A App
<b>FPPAID2A</b> Adn
<b>FPPAID2A</b> Adn

### **RANGE STATEMENT**

State/territory legislation, standards and codes of practice applying to occupational health and safety and first aid.

Australian Resuscitation Council recommendations in published policy statements.

Conditions generally recognised and able to be treated in a first aid capacity:

- asthma
- · external and internal bleeding
- burns and scalds
- cerebro-vascular accident (eg. stroke)
- diabetes
- · electric shock
- epileptic seizure
- eye injuries, minor and major
- fractures, major and minor
- head injuries, major and minor
- myocardial infarction (eg. heart attack)
- · poisoning including snake bite
- shock
- crush injuries
- soft tissue injuries
- · heat exhaustion and stroke

Injuries where aggravation is avoided are those commonly found in the industry, eg. falls, crush, manual handling, and machinery.

#### Sources of advice and referral including:

- · qualified first aid personnel
- · workplace first aid centre
- poisons centre
- medical practitioners
- ambulance service
- hospitals

OH&S legislation relating to the administration of first aid.

# Unit FPPAID1A: Apply Basic First Aid Techniques

ELEMENTS	PERFORMANCE CRITERIA
FPPAID1A.1 Treat minor skin injuries.	<ul> <li>Skin injuries are treated in accordance with standard first-aid techniques.</li> <li>Splinters are removed using recognised first aid techniques.</li> <li>Skin injuries are appropriately protected while working, in accordance with recognised first aid practice.</li> <li>Injuries requiring professional treatment are identified and arrangements are made as far as possible to ensure treatment is obtained.</li> </ul>
FPPAID1A.2 Avoid aggravation of injuries.	<ul> <li>Potential for further injury to victim and others present from injury-causing agent is determined.</li> <li>Victim and others are removed from injury-causing agent where appropriate, using recognised techniques.</li> <li>Professional advice is obtained promptly, according to circumstances of injury.</li> </ul>
FPPAID1A.3 Provide emergency assistance where hazardous substances may have been absorbed.	<ul> <li>Symptoms of suspected poisoning are identified by observation, questioning and documentation.</li> <li>Route through which poison entered the body is ascertained as far as possible.</li> <li>Treatment for poisoning is in accordance with the Poisons Information Centre procedures, workplace documentation, material safety data sheets and container labels.</li> <li>Professional advice is obtained promptly.</li> </ul>
FPPAID1A.4 Stop bleeding.	<ul> <li>Casualty's trunk and limbs are positioned according to standard first aid techniques.</li> <li>Wound is checked to ensure it does not contain foreign bodies or protruding bones.</li> <li>Wounds clear of protruding matter have direct pressure applied to them using hands, pads and/or bandages according to standard first aid techniques.</li> <li>Casualty is monitored for shock.</li> <li>Professional medical assistance is obtained promptly.</li> </ul>
FPPAID1A.5 Report accident and treatment.	<ul> <li>Accident/incident is reported to enterprise procedures.</li> <li>Treatment is reported to person in charge of first aid or recorded to enterprise procedures.</li> </ul>

- Demonstrates competence in first aid procedures by performance in simulated situations, eg. skin injuries, aggravation of injury.
- Demonstrates knowledge of referral procedures by appropriate answers to questions related to simulated situation or to questions about procedures.
- Identifies common poisonous substances in industry.

Pulp and	Paper Manufacturing In	dustry Competency	Standard

### **Unit FPPAID2A: Administer First Aid Procedures**

ELEMENTS	PERFORMANCE CRITERIA
FPPAID2A.1 Assess crisis situation.	<ul> <li>Accident scene is checked for existing or potential hazards.</li> <li>Casualty is approached only when it is safe to do so.</li> <li>Casualty is moved only if absolutely necessary.</li> <li>Nature of injuries are identified as far as possible.</li> </ul>
FPPAID2A.2 Seek professional help.	<ul> <li>Ambulance and/or professional services are called and appropriate information provided to obtain additional treatment in more serious cases.</li> <li>Casualty is reassured.</li> <li>Casualty is monitored until professional help arrives.</li> </ul>
FPPAID2A.3 Apply cross infection and hygiene procedures for protection of self and victim.	<ul> <li>Procedures recommended by the St. John's Ambulance/ Red Cross are used to prevent cross-infection between victim, self, others and surroundings.</li> <li>First aid materials are appropriately disposed of.</li> <li>Instruments are cleaned and disinfected.</li> </ul>
FPPAID2A.4 Maintain breathing and circulation of victim.	Breathing and circulation is checked.     Cardiopulmonary resuscitation procedures or expired air resuscitation techniques as recommended by the Australian Resuscitation Council are applied to maintain breathing and circulation where required.
FPPAID2A.5 Minimise the effects of injury or illness.	<ul> <li>Symptoms and signs of common conditions are recognised and conditions are appropriately managed in a first aid capacity.</li> <li>Condition of casualty is assessed and most serious condition attended to first.</li> <li>Wounds are treated according to recognised procedures.</li> </ul>
FPPAID2A.6 Maintain required records.	<ul> <li>Accident/injury forms as required by State/Territory legislation are completed for later reference.</li> <li>Completed forms are securely stored in accordance with privacy and legislative requirements.</li> </ul>

- Demonstrates and explains performance of first aid procedures in simulated situations.
- Demonstrates referral, infection prevention and recording procedures by answers to questions related to the simulated situation or to questions about the procedures.

### **HAND TOOLS**

		UNITS	
FPPHTL1A	Use hand held tools.		

### RANGE STATEMENT

### Hand tool use includes but is not limited to:

- hand saws
- knives
- chisels
- hammers
- hand drills
- files
- rasps

### Hand held power tool use includes, but is not limited to:

- electric drills
- grinders
- sanders

### Operational maintenance tasks include:

- cleaning
- lubricating
- tightening
- adjusting

### **Unit FPPHTL1A: Use Hand Held Tools**

ELEMENTS	PERFORMANCE CRITERIA
FPPHTL1A.1 Select appropriate hand operated or hand held power tools.	<ul> <li>OH&amp;S regulations, policies and precautions are followed.</li> <li>Production requirements including products and processes are identified from orders and supervisor's instructions</li> <li>Appropriate hand and/or power tools are selected according to task requirements.</li> <li>Tools are checked before use and unsafe or faulty items identified and marked for repair to enterprise standard procedures.</li> </ul>
FPPHTL1A.2 Operate hand operated or hand held power tools.	<ul> <li>OH&amp;S regulations and safety precautions are followed.</li> <li>Hand tools and/or power tools are used according to manufacturers' recommendations to produce desired outcome(s).</li> <li>Tools becoming unsafe or faulty during use are identified and marked for repair to enterprise standard procedures.</li> <li>Tool operation and work results produced are checked to identify need for tool repair or sharpening.</li> <li>Tools requiring repair or sharpening are marked to enterprise standard procedures.</li> <li>Operational maintenance of tools is undertaken to enterprise standards, manufacturers' recommendations and applicable legislative requirements.</li> <li>Tools are stored safely and in appropriate location according to enterprise requirements.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe work requirements and practices.</li> </ul>

- Demonstrates the ability to interpret orders and instructions for a typical range of products manufactured by the enterprise.
- Demonstrates the ability to select appropriate tools for a range of typical tasks.
- Demonstrates the ability to use a range of hand operated and hand held power tools.
- Explains checking procedure for tools
- Explains marking procedures for faulty tools.
- Explains typical faults in tools and work produced.
- Explains characteristics of blunt blades for a range of tools.
- Implements OH&S requirements.

# MATERIALS HANDLING VEHICLES AND EQUIPMENT

### UNITS

**FPPMHV1A** Operate materials handling vehicles and equipment.

**FPPMHV2A** Operate overhead crane.

### **RANGE STATEMENT**

### Materials handling equipment and accessories: [excludes Unit FPPMHV2A]

- fork lift
- side loader
- straddle truck
- slewing or non-slewing mobile crane
- · front end loader
- · fork lift tines
- · crane hooks
- chains
- · slings and straps
- roll grabs

#### Overhead cranes and accessories: [excludes Unit FPPMHV1A]

- · pedestrian or remote operated
- cabin operated
- · crane attachments

### Operations may include the following conditions: [excludes Unit FPPMHV2A)

- · mill and roads
- · even and irregular ground

#### Job accessories may include:

- · safety clothing and equipment
- vehicle manuals
- · vehicle tools
- · job and vehicle records and writing equipment
- · first aid kit
- breakdown gear

### Range of loads and lifting procedures:

- standard mill loads
- · non-standard requiring trial lifts

### Legislation, policy and procedures:

- enterprise policy, procedures and guidelines
- OH&S and environmental regulatory requirements (state and commonwealth)
- quality assurance requirements
- Standard Operating Procedures (SOP)

#### Maintenance:

- · as per site agreement
- operator maintenance schedules
- maintenance systems

### Communication:

- team members
- management
- maintenance

# Unit FPPMHV1A: Operate Materials Handling Vehicles and Equipment

ELEMENTS	PERFORMANCE CRITERIA
FPPMHV1A.1 Perform routine checks and maintenance on equipment.	<ul> <li>Cab interior is cleaned to ensure maximum visibility and freedom of movement.</li> <li>Vehicle is cleaned to ensure safe and tidy operation to enterprise procedures.</li> <li>Pre-operating checks are completed according to the manufacturer's specifications and enterprise procedures.</li> </ul>
FPPMHV1A.2 Select equipment and prepare to shift loads.	<ul> <li>Equipment and/or attachments suitable for the loads are selected and fitted as required for task.</li> <li>Check is made of equipment and accessories in accordance with manufacturer's instructions or equivalent.</li> <li>Operating area is inspected to identify hazards within the vehicle operational area to: <ul> <li>remove them where appropriate</li> <li>plan to control them.</li> <li>Nearby personnel are advised of impending vehicle operation as appropriate.</li> <li>Communication signals to be used are confirmed with appropriate personnel.</li> <li>Engine is started in accordance with manufacturer's guidelines and enterprise start-up procedures.</li> <li>Instruments and gauges are monitored to ensure vehicle operation is safe according to manufacturer's specifications and safety rules.</li> <li>Checks are made of various components of the vehicle to ensure they are operational in accordance with enterprise and manufacturer's documentation and safety rules.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul> </li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPMHV1A.3 Shutdown and secure equipment.	<ul> <li>Vehicle is parked to avoid site and equipment hazards.</li> <li>Shutdown procedure is completed to manufacturer's requirements and enterprise procedures ensuring safety locks and implements are in place.</li> <li>Equipment faults are reported to enterprise procedures.</li> </ul>
FPPMHV1A.4 Identify and lift load.	<ul> <li>Load location is identified from load sheet/instructions in accordance with enterprise procedures.</li> <li>Weight of load is assessed to ensure compliance with equipment load-plate specifications.</li> <li>Multiple loads are stacked for combined lift.</li> <li>Stability of load over transport route is assessed.</li> <li>Vehicle is steered, manoeuvred and positioned to ensure efficient and safe operation in co-operation with other personnel, and according to enterprise and site regulations and procedures.</li> <li>Vehicle speeds and engine power are managed to safe operating limits and manufacturer's specifications.</li> <li>Communications with loading personnel are maintained according to agreed signals.</li> <li>Loads are lifted so that stability of load and vehicle are maintained.</li> <li>Vehicle is constantly monitored using gauges, warning devices and observation of vehicle performance to determine operating faults.</li> <li>Equipment faults creating hazardous operations are identified, operations suspended and the fault reported to enterprise procedures.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>

- Demonstrates knowledge of:
  - manufacturer's and enterprise requirements on equipment operation for yard and road operations
  - mill, yard and road hazards.
- Explains movement of range of unit and multiple-unit loads within yard and on road.
- Demonstration of equipment operation should cover:
  - appropriate and controlled movements to manufacturer's specifications and standard operating procedures
  - no injury occurs to personnel
  - no damage occurs to property, equipment or load
  - efficient utilisation of loading area.
- Works within OH&S requirements.
- Explains the layout of the area of operation.
- Explains the most efficient movement around mill to transfer loads.
- Conducts routine maintenance within SOP.

### Unit FPPMHV2A: Operate Overhead Crane

ELEMENTS	PERFORMANCE CRITERIA
FPPMHV2A.1 Check crane operation and work area.	<ul> <li>External and operational check is made of crane in accordance with manufacturer's instructions and enterprise standards.</li> <li>Attachments are inspected to ensure security.</li> <li>Crane service log book is checked to ensure all service requirements have been met.</li> <li>Site hazards are identified and assessed in accordance with Australian Standards and OH&amp;S procedures.</li> <li>Weather conditions are assessed, where appropriate, to determine safe operating conditions for outside cranes.</li> <li>Nearby personnel are notified of impending crane operation as required.</li> <li>Communication signals are confirmed with any assisting personnel.</li> <li>Safety procedures are followed in energising equipment, to enterprise procedures.</li> <li>Checks are made for abnormal noise and operation after the crane has been started.</li> <li>Crane equipment and controls are located and identified and their correct operation testing in accordance with prescribed procedures.</li> <li>Lifting gear is inspected to segregate defective items.</li> <li>Defective equipment is reported according to enterprise procedures and defects noted in crane service log book.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe work requirements and practices.</li> </ul>
FPPMHV2A.2 Secure and transfer loads.	<ul> <li>Work requirements are obtained according to enterprise procedures.</li> <li>Work is planned to maintain mill work flow and minimise unloaded movement.</li> <li>Weight of load is estimated to determine lifting requirement.</li> <li>Configuration of lifting gear proposed for load is checked against Australian Standards and codes of practice.</li> <li>Appropriate checks are made on non-standard loads to ensure safe lifting conditions.</li> <li>Load is lowered for corrective action to be taken where trial lift reveals an unacceptable operational situation.</li> <li>Hazard control strategies are implemented for identified hazards.</li> <li>Load is hoisted and lowered into position using all relevant crane movements in accordance with Australian Standards, and enterprise requirements.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPMHV2A.2 Secure and transfer loads cont.	<ul> <li>Gantry and carriage is positioned to ensure load to be lifted is plumbed under hook.</li> <li>Tagline is used where control of load is critical.</li> <li>Stability of load is maintained at all times.</li> <li>Signals are made and interpreted with associated persons to co-ordinate work.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe work requirements and practices.</li> </ul>
FPPMHV2A.3 Shutdown crane.	<ul> <li>Crane is shutdown in accordance with manufacturer's instructions.</li> <li>Safety locks, brakes and securing procedures are applied in accordance with Australian Standards to prevent accidental crane movements.</li> <li>Lifting gear is checked and defective equipment is segregated and reported to enterprise procedures.</li> </ul>

### **EVIDENCE GUIDE**

- Demonstrates knowledge of crane and mill hazards, manufacturer's, Australian Standards and enterprise requirements on crane operation.
- Demonstrates start-up and shutdown procedures.
- Demonstrates movement of standard and non-standard loads ensuring:
  - load is correctly slung
  - correct operation of crane

load is within crane limits, particularly where load measuring devices are fitted.

- Demonstrates scheduling of movements to maintain material flow in mill to required timing.
- Implements OH&S requirements.
- · Works within SOP for overhead crane operation.
- Demonstrates hand signals.

### **NUMERACY**

# FPNUM1A Estimate and calculate basic data. FPNUM2A Measure and calculate routine information. FPNUM3A Calculate basic performance measures. FPNUM4A Calculate and analyse production and financial performance.

### **RANGE STATEMENT**

#### The arithmetic processes include:

- addition
- subtraction
- multiplication
- division.

#### Product characteristics can include:

- length
- weight
- capacity
- time
- · temperature.

### Estimates and calculations may be applied to:

- product characteristics, eg. weight, length, volume
- production tallies.

### Forms for recording information may include:

- · Statistical Process Charts
- Production Tally Sheets.

Calculations may be undertaken manually or through the use of a calculator.

### Records may be kept:

- manually
- in computer-based systems.

### Measuring devices may typically include: [excludes Unit FPPNUM1A]

- scales
- · vernier callipers
- meters
- gauges.

### Calibrations will typically relate to measuring associated with: [excludes Units FPPNUM1A-3]

- weight
- volume
- temperature
- · length.

Estimating techniques should be used to confirm the general accuracy of calculations.

# Unit FPPNUM1A: Estimate and Calculate Basic Data

ELEMENTS	PERFORMANCE CRITERIA
N1.1 Estimate, calculate and record basic workplace data.	<ul> <li>Product characteristics are estimated to check variation requirements.</li> <li>Addition, subtraction, multiplication and division are used for workplace calculations.</li> <li>Amounts are recorded in standard format.</li> </ul>

- Estimate measures using whole numbers and decimals.
- Calculate results using whole numbers and/or fractions and decimals.
- · Record statistical data on standard forms.
- Write numbers accurately and legibly.

## Unit FPPNUM2A: Measure and Calculate Routine Information

ELEMENTS	PERFORMANCE CRITERIA
FPPNUM2A.1 Use routine measuring instruments.	<ul> <li>Measuring instruments are selected and used to accurately measure common workplace units.</li> <li>Measuring instrument faults are identified and reported to ensure that they are available for subsequent use.</li> </ul>
FPPNUM2A.2 Complete routine arithmetic calculations.	<ul> <li>Basic arithmetic processes are used to calculate routine workplace measures.</li> <li>Estimating techniques are verified by use of arithmetic calculations.</li> </ul>
FPPNUM2A.3 Record data.	<ul> <li>Results are recorded using standard methods.</li> <li>Incorrect recording is identified and amended to ensure that fault is rectified.</li> </ul>

- Explains the purpose of measuring instruments.
- · Operates instruments to measure dimensions.
- Identifies routine faults in measuring instruments.
- Calculates routine measures using arithmetic processes involving:
  - whole numbers
  - fractions
  - decimals.
- Verifies estimations by calculations.
- Explains purpose of recording statistical data.
- Records information accurately in company format.

# Unit FPPNUM3A: Calculate Basic Performance Measures

ELEMENTS	PERFORMANCE CRITERIA
FPPNUM3A.1 Calculate performance measures.	<ul> <li>Percentages, ratios and proportion are calculated to derive workplace information.</li> <li>Deviations in performance from specification are estimated and calculated to determine the extent of the variation.</li> </ul>

- Explains the purpose of calculating percentages, ratios and proportions in the workplace.
- Identifies situations in which such calculations are used.
- Calculate each measure:
  - percentages
  - ratios
  - proportions
- Explains the meaning of the outcome of the calculations.
- Explains the purpose of identifying variations in performance.
- Estimates variation from specification.
- Calculates amount and percentage of the variation.

# **Unit FPPNUM4A: Calculate and Analyse Production and Financial Performance**

ELEMENTS	PERFORMANCE CRITERIA
FPPNUM4A.1 Calculate yield, wastage and productivity indicators.	<ul> <li>Yield, wastage and productivity measures are calculated to determine performance outcomes.</li> <li>Yield, wastage and productivity measures are compared with targets to determine variation of actual with planned performance.</li> </ul>
FPPNUM4A.2 Calculate and compare actual and budget performance.	<ul> <li>Costs are calculated and compared with standards/budgets to identify variance from planned performance.</li> <li>Financial results are analysed to identify costs which require particular attention in improving financial performance.</li> </ul>
FPPNUM4A.3 Prepare and analyse data.	<ul> <li>Data is consolidated with standard reporting format to report performance/activity.</li> <li>Time series data is interpreted from tables and graphs to identify performance trends.</li> </ul>
FPPNUM4A.4 Calculate calibration adjustments.	<ul> <li>Mathematical concepts associated with equipment calibration are understood and used to determine adjustment to equipment settings.</li> <li>Calibration calculation is verified by checking the accuracy of the adjustment in the actual work performance.</li> </ul>

- States the purpose of yield, wastage, productivity.
- Calculates yield, wastage and productivity.
- Determines and explains variation of planned with actual.
- Explains the purpose of comparing cost with budget.
- · Calculates variance of cost from budget.
- Explains the purpose of the data the company uses to record performance.
- Consolidates information from primary collection to format required and standard reporting clients
- Explains the key features of time series data presented in tables and graphs.
- Explains the trends illustrated in tables and graphs.
- Explains the purpose of calibrating of equipment.
- Applies mathematical concepts to determine whether equipment settings require adjustments.
- Verifies calibration calculation.

### **OCCUPATIONAL HEALTH & SAFETY**

UNITS		
FPPOHS1A	Follow defined OH&S procedures.	
FPPOHS2A	Implement and monitor OH&S policies and procedures.	
FPPOHS3A	Maintain and evaluate OH&S system.	
FPPOHS4A	Establish OH&S system.	

### **RANGE STATEMENT**

### Relevant occupational health and safety legislation, particularly:

- · general duty of care
- requirements for the maintenance and confidentiality of records of occupational injury and disease
- provision of information and training
- · regulations and codes of practice relating to hazards present in work area
- health and safety representatives and occupational health and safety committees
- · issues resolution.

#### Relevant workplace procedures will typically include:

- · hazard policies and procedures
- · emergency, fire and accident procedures
- · procedures for the use of personal protective clothing and equipment
- · hazard identification and issue resolution procedures
- job procedures and work instructions
- inspection
- housekeeping
- · consultation processes, either general or specific to occupational heath and safety
- · training and assessment
- · specific hazard policies and procedures
- · occupational health and safety information
- · occupational health and safety record keeping
- maintenance of plant and equipment.

### Hazardous events include accidents, fires and emergencies such as chemical spills.

### Procedures for dealing with hazardous events include:

- evacuation
- chemical containment
- first aid procedures.

#### Processes for consultation include:

- occupational health and safety committees
- consultation with health and safety representatives
- issue resolution procedures
- participative/consultative procedures.

#### Monitoring of activities may include the review of: [excludes Unit FPPOHS1A]

- · written reports
- performance appraisal
- · auditing procedures.

# Unit FPPOHS1A: Follow defined OH&S procedures.

ELEMENTS	PERFORMANCE CRITERIA
FPPOHS1A.1 Follow workplace procedures for hazard identification and risk control.	<ul> <li>Hazards in the work area are recognised and reported to designated personnel according to workplace procedures.</li> <li>Workplace procedures and work instructions for controlling risks are followed accurately.</li> <li>Workplace procedures for dealing with accidents, fires and emergencies are followed whenever necessary within scope of responsibilities and competencies.</li> </ul>
FPPOHS1A.2 Contribute to participative arrangements for the management of occupational health and safety.	<ul> <li>Occupational health and safety issues are raised with designated personnel in accordance with workplace procedures and relevant occupational health and safety legislation.</li> <li>Contribute to participative arrangements for occupational health and safety management in the workplace within organisational procedures and scope of responsibilities and competencies.</li> </ul>

- Demonstrates understanding of information regarding occupational health and safety legislation, codes of practice, workplace procedures and work instructions.
- Identifies and explains significant hazards in the workplace.
- Explains symbols used for occupational health and safety signs.
- Reports hazardous situations.

# Unit FPPOHS2A: Implement and monitor OH&S policies and procedures.

ELEMENTS	PERFORMANCE CRITERIA
FPPOHS2A.1 Provide information to the work group about occupational health and safety and the organisation's occupational health and safety policies, procedures and programs.	<ul> <li>Relevant provisions of occupational health and safety legislation and codes of practice are accurately and clearly explained to the work group.</li> <li>Information on the organisation's occupational health and safety policies, procedures and programs is provided in a readily accessible manner and is accurately and clearly explained to the work group.</li> <li>Information about identified hazards and the outcomes of risk assessment and risk control procedures is regularly provided and is accurately and clearly explained to the work group.</li> </ul>
FPPOHS2A.2 Implement and monitor participative arrangements for the management of occupational health and safety.	<ul> <li>Organisational procedures for consultation over occupational health and safety issues are implemented and monitored to ensure that all members of the work group have the opportunity to contribute.</li> <li>Issues raised through consultation are dealt with and resolved promptly or referred to the appropriate personnel for resolution in accordance with workplace procedures for issue resolution.</li> <li>The outcomes of consultation over occupational health and safety issues are made known to the work group promptly.</li> </ul>
FPPOHS2A.3 Implement and monitor the organisation's procedures for identifying hazards and assessing risks.	<ul> <li>The outcomes of consultation over occupational health and safety issues are made known to the work group promptly.</li> <li>Existing and potential hazards in the work area are identified and reported so that risk assessment and risk control procedures can be applied.</li> </ul>
FPPOHS2A.4 Implement and monitor the organisation's procedures for controlling risks.	<ul> <li>Work procedures to control risks are implemented and adherence to them by the work group is monitored in accordance with workplace procedures.</li> <li>Existing risk control measures are monitored and results reported regularly in accordance with workplace procedures.</li> <li>Inadequacies in existing risk control measures are identified in accordance with the hierarchy of control and reported to designated personnel.</li> <li>Inadequacies in resource allocation for implementation of risk control measures are identified and reported to designated personnel.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPOHS2A.5 Implement the organisation's procedures for dealing with hazardous event.	<ul> <li>Workplace procedures for dealing with hazardous events are implemented whenever necessary to ensure that prompt control action is taken.</li> <li>Hazardous events are investigated to identify their cause in accordance with investigation procedures.</li> <li>Control measures to prevent recurrence and minimise risks of hazardous events are implemented based on the hierarchy of control if within scope of responsibilities and competencies or alternatively referred to designated personnel for implementation.</li> </ul>
FPPOHS2A.6 Implement and monitor the organisation's procedures for providing occupational health and safety training.	<ul> <li>Occupational health and safety training needs are identified accurately, specifying gaps between occupational health and safety competencies required and those held by work group members.</li> <li>Arrangements are made for fulfilling identified occupational heath and safety training needs in both on and off-the-job training programs in consultation with relevant parties.</li> </ul>
FPPOHS2A.7 Implement and monitor the organisation's procedure for maintaining occupational health and safety records.	<ul> <li>Occupational health and safety records for work area are accurately and legibly completed in accordance with workplace requirements for occupational health and safety records and legal requirements for the maintenance of records of occupational injury and disease.</li> <li>Aggregate information from the area's occupational health and safety records is used to identify hazards and monitor risk control procedures within work area according to organisational procedures and within scope of responsibilities and competencies.</li> </ul>

- Demonstrates understanding of all applicable occupational health and safety legislation and codes of practice.
- Explains the hierarchy of control.
- Explains the significance of equal employment opportunity principles and practices for occupational health and safety.
- Explains the significance of other management systems and procedures for occupational health and safety.

# Unit FPPOHS3A: Maintain and evaluate OH&S system.

ELEMENTS	PERFORMANCE CRITERIA
FPPOHS3A.1 Maintain the framework for the occupational health and safety system in the area of responsibility.	<ul> <li>Financial and human resources for the operation of the occupational health and safety system are identified, sought and/or provided in a timely and consistent manner.</li> <li>Information on the occupational health and safety system and procedures for the area of responsibility is provided and explained in a form which is readily accessible to employees.</li> </ul>
FPPOHS3A.2 Maintain participative arrangements for the management of occupational health and safety.	<ul> <li>Appropriate consultative processes are maintained in consultation with employees and their representatives in accordance with relevant occupational health and safety legislation and consistent with the organisation's overall process for consultation.</li> <li>Issues raised through participation and consultation are dealt with and resolved promptly and effectively in accordance with procedures for issue resolution.</li> <li>Information about the outcomes of participation and consultation is provided in a manner accessible to employees.</li> </ul>
FPPOHS3A.3 Maintain procedures for identifying hazards.	<ul> <li>Existing and potential hazards within the area of managerial responsibility are correctly identified and identification confirmed in accordance with occupational health and safety legislation, codes of practice and trends identified from the occupational health and safety records system.</li> <li>Activities are appropriately monitored to ensure that this procedure is adopted effectively throughout area of managerial responsibility.</li> </ul>
FPPOHS3A.4 Maintain procedures for assessing risks.	<ul> <li>Risks presented by identified hazards are correctly assessed in accordance with occupational health and safety legislation and codes of practice.</li> <li>Activities are monitored to ensure that this procedure is adopted effectively throughout the area of managerial responsibility.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPOHS3A.5 Maintain procedures for controlling risks.	<ul> <li>Measures to control assessed risks are implemented in accordance with the hierarchy of control, relevant occupational health and safety legislation, codes of practice and trends identified from the occupational health and safety records system.</li> <li>When measures which control a risk at its source are not immediately practicable, interim solutions are implemented until a permanent control measure is developed.</li> <li>Activities are monitored to ensure that the risk control procedure is adopted effectively throughout the area of managerial responsibility.</li> <li>Inadequacies in existing risk control measures are identified in accordance with the hierarchy of control, and resources enabling implementation of new measures are sought and/or provided according to appropriate procedures.</li> </ul>
FPPOHS3A.6 Maintain organisational procedures for dealing with hazardous events.	<ul> <li>Potential hazardous events are correctly identified.</li> <li>Appropriate information and training is provided to all employees to enable implementation of the correct procedures in all relevant circumstances.</li> </ul>
FPPOHS3A.7 Maintain an occupational health and safety training program.	An occupational health and safety training program is implemented to identify and fulfil employees' occupational health and safety training needs.
FPPOHS3A.8 Maintain a system for occupational health and safety records.	A system for keeping occupational health and safety records is monitored to allow identification of patterns of occupational injury and disease within the area of managerial responsibility.
FPPOHS3A.9 Evaluate the organisation's occupational health and safety system and related policies, procedures and programs.	<ul> <li>The effectiveness of the occupational health and safety system and related policies, procedures and programs is assessed according to the organisation's aims with respect to occupational health and safety.</li> <li>Improvements to the occupational health and safety system are developed and implemented to ensure more effective achievement of the organisation's aims with respect to occupational health and safety.</li> <li>Compliance with occupational health and safety legislation and codes of practice is assessed to ensure that legal occupational health and safety standards are maintained as a minimum.</li> </ul>

- Demonstrates knowledge of all relevant occupational health and safety legislation and codes of practice and how they will be implemented within the area of responsibility.
- Explains the hierarchy of control (the preferred order of risk control measures from most to least preferred, that is, elimination, engineering controls, administrative controls and, lastly, personal protective equipment).
- Explains the significance of equal employment opportunity principles and practices for occupational health and safety.
- Demonstrates use of the enterprise's management systems and procedures for occupational health and safety.

### Unit FPPOHS4A: Establish OH&S system.

ELEMENTS	PERFORMANCE CRITERIA
FPPOHS4A.1 Establish the framework for the occupational health and safety system in the area of responsibility.	<ul> <li>Occupational health and safety policies are developed which clearly express the organisation's commitment with respect to occupational health and safety within the area of managerial responsibility and how relevant occupational health and safety legislation will be implemented, consistent with overall organisational policies.</li> <li>Occupational health and safety responsibilities and duties which will allow implementation and integration of the occupational health and safety system are clearly defined, allocated and included in job descriptions and duty statements for all relevant positions.</li> <li>Financial and human resources for the operation of the occupational health and safety system are identified, sought and/or provided in a timely and consistent manner.</li> <li>Information on the occupational health and safety system and procedures for the area of responsibility is provided and explained in a form which is readily accessible to employees.</li> </ul>
FPPOHS4A.2 Establish participative arrangements for the management of occupational health and safety.	<ul> <li>Appropriate consultative processes are established in consultation with employees and their representatives in accordance with relevant occupational health and safety legislation and consistent with the organisation's overall process for consultation.</li> <li>Information about the outcomes of participation and consultation is provided in a manner accessible to employees.</li> </ul>
FPPOHS4A.3 Establish procedures for identifying hazards.	<ul> <li>A procedure for on-going identification of hazards is developed and integrated within systems of work and procedures.</li> <li>Hazard identification is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that new hazards are not created.</li> </ul>
FPPOHS4A.4 Establish procedures for assessing risks.	<ul> <li>Risks presented by identified hazards are correctly assessed in accordance with occupational health and safety legislation and codes of practice.</li> <li>A procedure for on-going assessment of risks is developed and integrated within systems of work and procedures.</li> <li>Risk assessment is addressed at the planning, design and evaluation stages of any change within the area of managerial responsibility to ensure that the risk from hazards is not increased.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPOHS4A.5 Establish procedures for controlling risks.	<ul> <li>Measures to control assessed risks are developed in accordance with the hierarchy of control, relevant occupational health and safety legislation, codes of practice and trends identified from the occupational health and safety records system.</li> <li>A procedure for on-going control of risks, based on the hierarchy of control, is developed and integrated within general systems of work and procedures.</li> <li>Risk control is addressed at the planning, design and evaluation stages of any change within the area of managerial responsibility to ensure that adequate risk control measures are included.</li> <li>Inadequacies in existing risk control measures are identified in accordance with the hierarchy of control, and resources enabling implementation of new measures are sought and/or provided according to appropriate procedures.</li> </ul>
FPPOHS4A.6 Establish organisational procedures for dealing with hazardous events.	<ul> <li>Potential hazardous events are correctly identified.</li> <li>Procedures which would control the risks associated with hazardous events and meet any legislative requirements as a minimum are developed in consultation with appropriate emergency services.</li> <li>Appropriate information and training is provided to all employees to enable implementation of the correct procedures in all relevant circumstances.</li> </ul>
FPPOHS4A.7 Establish an occupational health and safety training program.	An occupational health and safety training program is developed to identify and fulfil employees' occupational health and safety training needs as part of the organisation's general training program.
FPPOHS4A.8 Establish a system for occupational health and safety records.	A system for keeping occupational health and safety records is established to allow identification of patterns of occupational injury and disease within the area of managerial responsibility.

- Demonstrates knowledge of all relevant occupational health and safety legislation and codes of practice and how they will be established within the area of responsibility.
- Explains the hierarchy of control (the preferred order of risk control measures from most to least preferred, that is, elimination, engineering controls, administrative controls and, lastly, personal protective equipment).
- Explains the significance of equal employment opportunity principles and practices for occupational health and safety.
- Demonstrates use of the enterprise's management systems and procedures for occupational health and safety.

### **PLANNING AND ORGANISING**

### UNITS

**FPPLN1A** Plan and undertake a routine task.

**FPPPLN2A** Plan a complete activity.

**FPPPLN3A** Plan a complex activity.

### **RANGE STATEMENT**

### Information provided to assist planning includes:

- instructions
- standard operation sheets
- specifications
- quality requirements
- time allowances
- outcome requirements
- performance requirements

Plan may or may not be documented.

Planning may involve activities performed in accordance with established procedures but may require modification of procedures to deal with unforeseen developments.

Activity may require prioritising and sequencing of individual components.

Planning will be related to work tasks and environments which are familiar to individual undertaking planning activity.

### Plans may be for:

- tasks involving one or more steps or functions
- a complete activity [excludes Unit FPPPLN1A]
- a complex activity. [excludes Units FPPPLN1A, FPPPLN2A]

# Unit FPPPLN1A: Plan and Undertake a Routine Task

ELEMENTS	PERFORMANCE CRITERIA
FPPLN1A.1 Identify tasks requirements.	<ul> <li>Instructions on procedures are obtained, understood and clarified.</li> <li>Task outcomes are identified.</li> <li>Relevant specifications for task outcomes are obtained, understood and clarified.</li> <li>Task requirements, including completion time and quality measures are identified.</li> </ul>
FPPLN1A.2 Plan steps required to complete task.	<ul> <li>Individual steps or activities required to undertake task are understood and where necessary, clarified.</li> <li>Planned steps and outcomes are checked to ensure conformity with instructions and relevant specifications.</li> <li>Required sequence of activities to be completed are identified in plan.</li> </ul>
FPPPLN1A.3 Review plan.	<ul> <li>Outcomes are identified and compared with (planned) objectives, task instructions, specifications and task requirements.</li> <li>Plan is revised, when necessary, to better meet objectives and task requirements.</li> </ul>

- Explains how to go about planning the completion of a task.
- Develops a plan for a task from information provided, incorporating technical, quality and time requirements, which is capable of achieving appropriate results.
- Modifies plans as a result of outcomes achieved.

### **Unit FPPPLN2A: Plan a Complete Activity**

ELEMENTS	PERFORMANCE CRITERIA
FPPLN2A.1 Identify activity requirements.	<ul> <li>Instructions on objectives and performance requirements are obtained, understood and clarified where necessary.</li> <li>Activity outcomes are identified.</li> <li>Relevant specifications for activity outcomes are obtained, understood and clarified, where necessary.</li> <li>Activity requirements, including overall timeframe for activity, quality requirements and criteria for acceptable completion are identified.</li> <li>Individual components of activity are identified and prioritised, based on instructions as to objectives, performance requirements and specifications.</li> </ul>
FPPPLN2A.2 Implement plan.	<ul> <li>Plan is organised in readiness for implementation.</li> <li>Plan is implemented.</li> <li>Component activities and requirements of plan are carried out in sequence.</li> <li>Plan is taken to completion.</li> </ul>
FPPPLN2A.3 Review and modify plan.	<ul> <li>Outcomes of plan are identified and compared with original objectives.</li> <li>Opportunities for improvement, based on implementation experience are identified.</li> <li>Identified improvement opportunities are incorporated into existing and future planning activities.</li> <li>Report is prepared outlining completion of activities, any unforeseen difficulties and resolutions.</li> </ul>

- Develops a plan for an activity from information provided, incorporating technical, quality and time requirements, which is capable of appropriate results.
- · Modifies plans as a result of outcomes achieved.
- Priorities components of activities to achieve performance, quality and time requirements.

### **Unit FPPPLN3A: Plan a Complex Activity**

ELEMENTS	PERFORMANCE CRITERIA
FPPLN3A.1 Identify complex activity requirements.	<ul> <li>Information recording timeframe, quality requirements, personal time availability, own and other resources available are obtained and examined.</li> <li>Resources required for complex activity completion are identified.</li> <li>Time available for completion of complex activity is identified.</li> </ul>
FPPLN3A.2 Identify work method.	<ul> <li>Alternative work methods to meet complex activity objectives are identified.</li> <li>Relative advantage and disadvantage of each work method is established.</li> <li>Most appropriate work method is selected.</li> </ul>
FPPLN3A.3 Prepare complex activity plan.	<ul> <li>Appropriate sequences of tasks are determined.</li> <li>Critical path for completion of complex activity within time and budget is determined.</li> <li>Individual tasks required to apply work method and meet objectives are identified.</li> <li>Complex activity plan is documented.</li> </ul>

- Develops a plan for a complex activity from information provided, incorporating technical, quality and time requirements, which is capable of appropriate results.
- Modifies plans as a result of outcomes achieved.
- Priorities components of complex activities to achieve performance, quality and time requirements.

### PREVENTATIVE MAINTENANCE

UNITS		
FPPPRM1A	Undertake preventative maintenance.	

#### Indicative functions may include:

- Inspection
  - visual
  - mechanical checks
- · Containment of
  - potential hazards
  - spillage
  - leaks
- Servicing
  - lubrication
  - pressure checks
  - refilling
  - removal/replacing
  - isolation SOP
- First Aid
  - application of procedures

### Legislation, policy and procedures:

- OH&S policies and procedures and other statutory requirements including safe work practices
- Enterprise Standard Procedures
- · Relevant operator licences and endorsements

#### Maintenance:

- As per site agreement
- Maintenance systems
- Maintenance schedules

### Resources may include:

- · Personal protective equipment and clothing
- SOP
- Compressed air
- · Hand/power tools
- · Machine systems

### Documentation/procedures/reports:

- Logsheets
- Non-conformance reports

#### **Communication channels**

- Team members
- Maintenance services
- Management/process co-ordinator
- Internal/external customers/suppliers

## Unit FPPRM1A: Undertake Preventative Maintenance

ELEMENTS	PERFORMANCE CRITERIA
FPPRM1A.1 Carry out preventative maintenance of plant and equipment.	<ul> <li>Correct personal protective clothing/equipment is used.</li> <li>Lubrication schedules are maintained.</li> <li>Standard precautions are taken to protect the environment.</li> <li>Process and instrumentation diagrams are interpreted and related equipment located.</li> <li>Faults and operating problems are identified and remedial action taken.</li> <li>Appropriate tools and equipment for maintenance are used correctly.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures (SOP), environmental and safe working requirements and practices.</li> </ul>

- Identifies and investigates reasons for faulty equipment.
- Identifies and explains locations/items of potential hazards and procedures to overcome them.
- Selects appropriate hand and/or powertools according to task requirements.
- Checks tools before use and unsafe or faulty items identified and marked for repair to enterprise SOP.
- Explains the consequences of inadequate minor maintenance.
- Demonstrates ability to communicate with team and related service personnel.
- Completes minor maintenance tasks consistently in accordance with SOP.
- Demonstrates appropriate adjustments to be made as required to meet changing conditions.
- Maintains a clean and hazard free work area.

### PROBLEM SOLVING

UNITS		
FPPPRS1A	Solve problems in the workplace (basic).	
FPPPRS2A	Solve problems in the workplace (advanced).	
FPPPRS3A	Troubleshoot and rectify pulp and paper systems.	

The competencies described in the problem solving units are applicable areas the functions and groups of functions in a paper mill.

### Complexity of problems solved:

- may require consultation with other departments/outside clients
- problem may be affected by number and availability of resources
- problem may involve non-routine system of work [excludes Unit FPPPRS1A]
- problem offered by a broad set of factors [excludes Unit FPPPRS1A]

### Options/solutions may involved:

- compromise
- timeframe determined by individual
- solution is determined by taking into account all variables that affect it, including resources and budget
- · assisting others
- designated officer
- other departments
- peers and subordinates

### Materials/Supplies:

As required for the function(s) in which the problem solving is being applied.

#### **Equipment:**

As required for the function(s) in which the problem solving is being applied:

### Legislation, policy and procedures:

- OH&S policies and procedures
- hazardous chemical handling
- air and gas discharges
- relevant endorsed licences

#### **Documentation/procedures/reports:**

- work instructions/purchase orders
- log sheets and shift reports
- work orders
- exception documents
- deliver/distribution documentation

- environmental legislation/requirements
- Standard Operating Procedures (SOP)
- quality assurance requirements
- safety instructions
- tally/production records
- Standard Operating Procedures (SOP)
- incident reports
- materials Safety Data Sheets (MSDS)
- · process and instructions diagrams

### Sampling/Testing:

As required for the function(s) in which the problem solving is being applied.

### Technology:

- computer data entry, retrieval and interpretations
- analog control systems

#### **Communication:**

- Internal/external customers and suppliers
- team member
- maintenance services
- production/service co-ordiantor

# Unit FPPRS1A: Solve Problems in the Workplace (Basic)

ELEMENTS	PERFORMANCE CRITERIA
FPPPRS1A.1 Identify problems.	<ul> <li>Problems are identified.</li> <li>Nature of problem is clarified.</li> <li>Information and evidence of problem is gathered.</li> </ul>
FPPRS1A.2 Plan action to solve problem.	<ul> <li>Goals are set for dealing with problem.</li> <li>Timeframe available for solving problem is identified.</li> <li>Possible solutions are identified.</li> <li>Optimal solution is chosen.</li> </ul>
FPPRS1A.3 Implement and follow-up solution.	<ul> <li>Chosen solution is implemented within timeframe.</li> <li>Criteria are established to determine if chosen solution resolves problem.</li> <li>Chosen solution is evaluated against determined criteria and by checking with work group or designated officer, if applicable.</li> <li>Follow-up procedures are implemented.</li> <li>Follow-up contingency arrangements are implemented in consultation with work group and designated officer.</li> </ul>

- Devises and implements logical and efficient plans to solve problems.
- Evaluates action against determined criteria.
- Modifies and communicates plans in response to new circumstances.
- Assists others to solve problems, and plans and implement chosen solutions.

# Unit FPPRS2A: Solve Problems in the Workplace (Advanced)

ELEMENTS	PERFORMANCE CRITERIA
FPPRS2A.1 Identify problems.	<ul> <li>Potential problems, relevant to workplace, are identified.</li> <li>Checks of workplace environment and equipment are regularly made.</li> <li>Signs of routine problem(s) are identified.</li> <li>Non-routine problems are identified.</li> <li>Nature of problem is clarified.</li> <li>Information and evidence of problem is gathered.</li> <li>Relevant and irrelevant components of problem are identified.</li> </ul>
FPPRS2A.2 Plan action to solve problems.	<ul> <li>Achievable goals are set for dealing with problem.</li> <li>Timeframe available for solving problem is identified.</li> <li>Daily duties are organised in accordance with plan to solve problems.</li> <li>Time is managed appropriately.</li> <li>Access to relevant information is maintained.</li> </ul>
FPPRS2A.3 Assist others to identify and resolve problems in the workplace.	<ul> <li>Other workers are assisted in anticipating or identifying signs of a problem.</li> <li>Other workers are assisted in devising alternative options and/or strategies.</li> <li>Other workers are assisted in implementing chosen solution.</li> </ul>
FPPPRS2A.4 Implement and evaluate solutions.	<ul> <li>Possible solutions are identified.</li> <li>Most feasible and efficient solution is chosen.</li> <li>Chosen solution is implemented within timeframe.</li> <li>Criteria are established to determine if chosen solution resolves problem.</li> <li>Chosen solution is evaluated against determined criteria and by checking with work group or designated officer, if applicable.</li> <li>Follow-up procedures are implemented.</li> <li>Follow-up contingency arrangements are implemented in consultation with work group and designated officer.</li> </ul>

- Devises and implements logical and efficient plans to solve complex problems.
- Evaluates action against determined criteria.
- Modifies and communicates plans in response to new circumstances.
- Assists others to solve problems, and plans and implements chosen solutions.
- Identifies the problem and the appropriate problem solving technique for the problem.

# Unit FPPPRS3A: Troubleshoot and Rectify Pulp and Paper Systems

ELEMENTS	PERFORMANCE CRITERIA
PRS4.1 Identify and diagnose causes of faults.	<ul> <li>Alarms are interpreted to determine fault type and location.</li> <li>Sampling and testing results are interpreted to identify variations from specifications/schedule.</li> <li>Cause and source of problem is identified and located using appropriate diagnostic procedures.</li> <li>Relevant sources of data are accessed/referred to, to assist diagnosis.</li> <li>Work is completed within OH&amp;S, Standard Operating Procedures, environmental and safe working requirements and practices.</li> </ul>
PRS4.2 Rectify plant and equipment faults.	<ul> <li>Emergency stop/shut down, isolation and lockout procedures are in place prior to fault rectification.</li> <li>Faulty equipment/instrumentation is isolated, repaired or replaced.</li> <li>Running adjustments and routine maintenance requirements are carried out.</li> <li>Plant and equipment are returned to normal operation.</li> <li>Verification is communicated to relevant personnel in compliance with relevant site agreements and work practices.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
PRS4.3 Rectify product quality faults.	<ul> <li>Quality faults/variations are identified by observation, systematic sampling and testing.</li> <li>Samples for a range of tests are taken according to SOP.</li> <li>Test results are interpreted and operations adjusted to correct faults.</li> <li>Faults/causes are rectified if appropriate, or recommendations made for further action.</li> <li>Out-of-specification product is managed in accordance with SOP.</li> <li>Tests and test procedures comply with OH&amp;S and environmental requirements, and safe work practices.</li> </ul>
PRS4.4 Report and record system performance and product quality data.	<ul> <li>Variations from specification of product production and plant and equipment faults are documented/logged.</li> <li>Signs and symptoms of performance variation are entered into log.</li> <li>Assessment and evaluation of causes of deviation, and corrective action undertaken is recorded as required.</li> <li>Relevant information is communicated to appropriate personnel.</li> </ul>

- Identifies sources of operational data.
- Interprets relevant verbal and written information.
- Explains relevant systems, processes and functions.
- Identifies and implements in-process test requirements.
- Describes cause and effects of test results and actions.
- Explains impact of inappropriate responses.
- Explains product grade and process adjustment procedures.
- Describes causes and effects of system faults and rectification requirements.
- Identifies and implements operational procedures.
- Explains use and handling requirements of chemicals used; their purpose, effects, hazards and SOP.
- Uses technology to assist work performance.
- Communicates effectively with relevant personnel.
- Demonstrates that emergencies/crash shutdowns are dealt with in accordance with SOP.
- Demonstrates that Isolations and lockouts are conducted according to SOP.
- Demonstrates that relevant tests are conducted in accordance with SOP.
- Demonstrates that available data and test results are consistently interpreted and appropriate actions are selected and initiated.
- Demonstrates that grade specification/quality is consistently maintained or appropriate action taken.
- Works within OH&S, SOP, environmental and safe working requirements and practices.

### **QUALITY ASSURANCE**

UNITS		
FPPQAS1A	Apply basic quality assurance practices	
FPPQAS2A	Maintain quality in work section/sub-system	
FPPQAS3A	Co-ordinate quality assurance process	
FPPQAS4A	Oversee quality assurance process	

Work will be undertaken within company quality assurance policy, practices and procedures.

Company instructions will be provided for sampling and in-process inspection and testing activities.

The person will be aware of the potential environmental impact of out-of-standard performance to their customers.

Monitoring and reporting will typically involve the use and presentation of verbal and written information; the latter in standard format.

Recording may be by manual and/or electronic methods in standard format.

### Work is carried out within legislation, policies and procedures:

- Occupational Health & Safety
- environmental requirements
- · enterprise policies and procedures
- legislation (state and commonwealth)
- Standard Operating Procedures (SOP)
- ISO9000

### Unit FPPQAS1A: Apply Basic Quality Assurance Practices

ELEMENTS	PERFORMANCE CRITERIA
FPPQAS1A.1 Identify and monitor critical control points at work station.	<ul> <li>Critical control points at person's work station are identified to determine priorities for checking and maintaining quality.</li> <li>Critical control points are monitored according to the requirements of the quality assurance program.</li> </ul>
FPPQAS1A.2 Sample product for off-line testing.	<ul> <li>Representative samples of the product are drawn from the person's work area according to instructions.</li> <li>Samples are prepared in format required for transfer to designated location.</li> </ul>
FPPQAS1A.3 Perform inspection and test of own work.	<ul> <li>Inspections and tests are conducted to assure quality of product at the person's work station.</li> <li>Out-of-standard performance is identified and reported within the organisation's communication system.</li> <li>Routine inspection and test information is recorded accurately in the reporting system.</li> <li>Adjustments are made according to SOP.</li> <li>Non-conforming product is treated according to SOP.</li> <li>Faulty testing equipment is identified and reported.</li> </ul>

- Identifies critical control points for a specific task/activity.
- Explains the tests or action taken at these points.
- Explains the potential risk or loss or damage if the required actions are not performed.
- Explains the regulatory requirements relevant to the person's work area.
- Explains the reasons for inspection and sampling.
- Explains verbal and non-verbal instructions in order to produce acceptable samples.
- Apply sampling procedures to normal work situations in which the individual is engaged.
- Outlines actual/potential problems which may result in non-representative samples.
- Explains the potential results of collecting non-representative samples.
- Explains the reasons why the individual needs to carefully assure sampling integrity.
- Implements the procedures for handling samples after they have been collected.
- Explains the purpose of correctly recording sampling details.
- Describes the actual/potential effects of incorrect sample preparation and handling.
- Outlines the relationship between the individual and his/her work station in the quality assurance program.
- Explains the purpose of the inspection/tests completed at the person's work station.
- Completes the prescribed inspections/tests.
- Outlines the limits of acceptance for each inspection/test.
- Identifies out-of-standard performance of the above tests.
- Outlines the action to be taken when performance is outside quality limits.
- Records inspection/test information in the reporting system.

# Unit FPPQAS2A: Maintain Quality in Section/Sub-System

ELEMENTS	PERFORMANCE CRITERIA
FPPQAS2A.1 Identify and monitor critical control points in section/subsystem.	<ul> <li>Critical control points in the section/sub-system are identified to determine priorities for checking and maintaining quality.</li> <li>Performance is monitored at each critical control point in the section/sub-system to assure product quality and to identify need for corrective action.</li> </ul>
FPPQAS2A.2 Monitor performance quality.	<ul> <li>Monitor performance to assure compliance with quality specifications.</li> <li>Process control checks are used to record process data and to monitor performance.</li> <li>Out-of-standard performance in the section/sub-system is promptly identified, and rectified and/or reported to minimise loss and downtime.</li> <li>Non-conforming product is treated according to SOP.</li> </ul>

- Identifies the critical control points in section/sub-system in which person is working.
- Explains the tests and actions at each of these points.
- Outlines the roles/relationships of people in the designated work area in the quality assurance plan.
- Outlines the inspection/test procedures.
- Identifies the quality limits for each control point.
- Performs in-process checks/tests.
- Explains the purpose of the process control charts.
- Identifies the control charts used in the section/sub-system.
- Describes actual/potential problems if control charts are not completed to requirements.
- Interprets control chart data to establish whether intervention is required to correct actual/emerging problems.
- Identifies out-of-standard performance.
- Explains the roles/responsibilities of designated people who attend to out-of-standard performance.
- Describes probable reasons for out-of-standard performance.
- Outlines action(s) to rectify out-of-standard performance.
- Reports inspection/test information.

# Unit FPPQAS3A: Co-ordinate In-Process Quality Assurance

ELEMENTS	PERFORMANCE CRITERIA
FPPQAS3A.1 Identify and monitor critical control points in-process system.	<ul> <li>Critical control points in the process system are identified to determine priorities for checking and maintaining quality.</li> <li>Performance is monitored at each critical control point in the process system to assure quality and to identify need for corrective action.</li> </ul>
FPPQAS3A.2 Monitor performance in the process system.	<ul> <li>Product and process is monitored within the in-process quality assurance system and adjusted to achieve performance within standards.</li> <li>Relevant performance criteria is communicated to enable the required action to be taken.</li> <li>Product is inspected and action taken in accordance with SOP.</li> </ul>

- Identifies the critical control points in the process system.
- Explains the contents of inspection/test schedules.
- Outlines the implication of inadequate attention to monitoring process and product quality.
- Explains the regulatory requirements related to product and process quality assurance.
- Explains the importance of maintaining equipment and instrument calibration.
- Identifies product and process trends from in-process inspections/test results.
- Explains action to be taken when actual/emerging performance is outside specification limits.
- Defines the quality assurance problem which needs to be addressed.
- · Identifies options to rectify problems.
- Implements appropriate action to rectify problems.
- Explains roles, responsibilities and steps necessary to isolate and quarantine suspect product.

### Unit FPPQAS4A: Oversee Quality Assurance Process

ELEMENTS	PERFORMANCE CRITERIA
FPPQAS4A.1 Monitor inspection and test records.	<ul> <li>Inspection and test records are monitored to verify product quality and to identify performance trends.</li> <li>Status reports contain a description of proposals to introduce improved processes/procedures.</li> </ul>
FPPQAS4A.2 Review product samples.	<ul> <li>Product samples are reviewed to ensure inspection/test data accurately reflects output.</li> <li>Post collection procedures are implemented according to standard operating procedures.</li> </ul>
FPPQAS4A.3 Implement process changes.	Process changes are introduced and controlled so that quality assurance requirements are accomplished.
FPPQAS4A.4 Create and/or update operating instructions.	<ul> <li>Operating instructions are written so that they comprehensively document the details required for competent performance.</li> <li>Operating instructions are validated under operating conditions to verify their suitability.</li> </ul>

- Assembles in-process inspection/test and other quality data in prescribed format.
- Interprets results of in-process inspections/tests.
- Identifies trends of in-process inspection/test results.
- Explains actual/potential problems evident from trend analysis.
- Explains appropriate course(s) of action to rectify problems.
- Prepares process and product status report recommending changes to improve processes/procedures.
- Explains purpose of review process.
- Records sample review results in prescribed format.
- Identifies risks associated with samples and how they may be minimised.
- Explains post collection and procedure for handling samples.
- Explains the importance of change control.
- · Implements a change in the process.
- Identifies the actual/potential risks associated with uncontrolled changes in procedures.
- Explains the document controls associated with a procedure change.
- Explains the purpose of Standard Operating Procedures (SOP).
- Explains the actual/potential problems if SOP or their equivalent are non existent.
- Creates and/or updates SOP or their equivalent.
- Verifies the documentation.

### **SECURITY**

# FPPSEC1A Maintain security of site and building perimeters. FPPSEC2A Maintain security of premises and equipment.

Alarm systems may be monitored internally or by external security providers.

### Anomalies detected include:

- noise
- smoke
- fire
- damage to fences, buildings or equipment
- lights or equipment left in incorrect status
- presence of unauthorised personnel

### OH&S requirements include:

- use of safety equipment
- elimination of hazards
- · enterprise safety policy

# Unit FPPSEC1A: Maintain Security of Site and Building Perimeters

ELEMENTS	PERFORMANCE CRITERIA
FPPSEC1A.1 Monitor site communications.	<ul> <li>OH&amp;S regulations, policies and precautions are followed.</li> <li>Communication systems and equipment are monitored and responded to as required.</li> <li>Communications equipment is used according to enterprise standard procedures.</li> <li>Messages are recorded accurately and conveyed clearly to relevant personnel.</li> <li>Public enquires are handled courteously and referred to appropriate personnel.</li> </ul>
FPPSEC1A.2 Monitor and direct gate traffic.	<ul> <li>OH&amp;S regulations, policies and precautions are followed.</li> <li>Traffic in and out of site is observed and relevant details recorded as required by enterprise procedures.</li> <li>Unauthorised entry or exit of vehicles is recorded and actions taken in accordance with enterprise standard procedures.</li> <li>Checks of vehicle and hand luggage contents are carried out as required by enterprise procedures.</li> <li>Incoming vehicles are directed to appropriate unloading or parking areas.</li> <li>Incoming visitors are directed to appropriate contact points.</li> <li>Company on-site and vehicle/load safety rules are policed.</li> <li>Authorisation is checked for employees removing items from premises.</li> <li>Documentation for vehicles carrying despatched product is checked and loads verified.</li> <li>Vehicle and load weights are measured and recorded according to enterprise procedures.</li> <li>Relevant personnel are notified promptly of entries requiring their attention.</li> <li>Communication with drivers, visitors and site personnel is courteous and effective.</li> </ul>
FPPSEC1A.3 Assure fence and building security.	<ul> <li>OH&amp;S regulations, policies and precautions are followed.</li> <li>Gates are operated in order to control movement of traffic according to enterprise standard procedures.</li> <li>Gates are locked and secured at appropriate times.</li> <li>Gates, fences and alarms are regularly checked on site perimeter in accordance with enterprise procedures.</li> <li>Doors, windows and alarms are regularly checked on site buildings in accordance with enterprise procedures.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPSEC1A.3 Assure fence and building security cont.	<ul> <li>Anomalies and security breaches are identified and reported to relevant authorities or personnel in accordance with enterprise procedures.</li> <li>Security breaches are monitored, without compromising personal safety, until back-up arrives.</li> <li>Contact access is maintained during patrol activities by use of pager, mobile telephone or other means required by the enterprise.</li> <li>Details relevant to status of site security are communicated to changeover personnel.</li> <li>Communication with emergency authorities, alarm system providers and site personnel maximises efficiency of incident resolution.</li> </ul>
FPPSEC1A.4 Set and monitor alarms.	<ul> <li>OH&amp;S regulations, policies and precautions are followed.</li> <li>Alarms are activated and deactivated in accordance with manufacturers' instructions and enterprise procedures.</li> <li>Alarm faults are identified and reported to supervisor.</li> <li>Alarms are monitored and identified.</li> <li>Fire checks are routinely conducted in accordance with enterprise standard procedures.</li> <li>Alarms and fires are responded to in accordance with emergency procedures.</li> <li>Data required by enterprise is recorded.</li> <li>Communication with emergency authorities, alarm system providers and site personnel maximises efficiency of emergency resolution.</li> </ul>

- Identifies personnel and vehicles making deliveries or collecting goods.
- Explains site layout details.
- Utilises all site communication systems effectively.
- Controls vehicle and personnel access.
- Maintains records of visiting vehicles and persons.
- Prevents unauthorised removal of goods.
- Records required data.
- Explains security systems and procedures.
- Explains appropriate reactions to emergencies and security breaches.

# Unit FPPSEC2A: Maintain Security of Premises and Equipment

ELEMENTS	PERFORMANCE CRITERIA
FPPSEC2A.1 Assure building internal security.	<ul> <li>OH&amp;S regulations, policies and precautions are followed.</li> <li>Contact access is maintained during patrol activities by use of pager, mobile telephone or other means required by the enterprise.</li> <li>Doors, windows and alarms are regularly checked within site buildings in accordance with enterprise procedures.</li> <li>Lights, office equipment and production equipment are checked against standard requirements and special instructions provided by site personnel.</li> <li>Anomalies and security breaches are identified and reported to relevant authorities or personnel in accordance with enterprise procedures.</li> <li>Security breaches are monitored, without compromising personal safety until back-up arrives.</li> <li>Minor anomalies are recorded and resolved with relevant personnel.</li> <li>Management representative is contacted in the case of incident or emergency in accordance with enterprise standard procedures.</li> <li>Communication with emergency authorities, alarm system providers and site personnel maximises efficiency of incident resolution.</li> </ul>
FPPSEC2A.2 Monitor production equipment and carry out limited operation.	<ul> <li>OH&amp;S regulations, policies and precautions are followed.</li> <li>Contact access is maintained by use of pager, mobile telephone or other means required by the enterprise.</li> <li>Areas where only one person is working are routinely checked in accordance with enterprise safety policy.</li> <li>Production equipment and processes are monitored in accordance with: <ul> <li>standing operational requirements</li> <li>special requests from authorised production personnel.</li> </ul> </li> <li>Action is taken to start, stop, monitor, adjust, load or unload equipment consistent with detailed requirements and training received.</li> <li>Emergency shutdown procedures are executed when problems arise threatening personnel safety, security or equipment damage.</li> <li>Records are completed in accordance with special requests or standard procedures.</li> <li>Appropriate personnel are contacted in the case of incident or emergency in accordance with enterprise procedures.</li> <li>Communication with site personnel maximises efficiency of incident resolution.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPSEC2A.3 Maintain security logs and records.	<ul> <li>Security logs detailing site incidents, special requests and vehicle and personnel movements are maintained in accordance with enterprise standard procedures.</li> <li>Details relevant to status of site security are communicated to changeover personnel.</li> </ul>

- Demonstrates the ability to maintain security of internal areas.
- Operates equipment consistent with normal requirements.
- Identifies anomalies with equipment.
- · Maintains required records.
- Explains security systems and procedures.
- Explains appropriate reactions to emergencies and security breaches.
- Explains procedures and requirements for contact of personnel outside normal hours.

### **TESTING**

UNITS	
FPPTST1A	Sample and test product.

The competencies for this unit relate to sampling and testing product throughout the mill.

### Materials/Supplies

• Materials/supplies used with testing process.

### **Equipment**

- Sampling equipment
- Testing equipment

### Legislation, Policy and Procedures

- OH&S policies and procedures
- Standard Operating Procedures (SOP)
- · Quality standards
- Environmental legislation/requirements
- · Laboratory procedures

### Sampling and Testing

Testing as required for the system(s) in which sampling and tests are carried out. Tests may be conducted:

- Pre-process
- In-process
- End-of-process

### **Documentation/Procedures/Reports**

- · Laboratory procedures
- · Test sheets
- Non-conformance reports

### Technology

• Computer data entry, retrieval and interpretation.

### **Communication Channels**

- Management
- Production operators
- Laboratory staff

### **Unit FPPTST1A: Sample and Test Product**

ELEMENTS	PERFORMANCE CRITERIA
FPPTST1A.1 Receive, handle and store samples.	<ul> <li>Samples are registered upon receipt.</li> <li>Labelling and history of sampling is checked in accordance with Standard Operating Procedures (SOP).</li> <li>Sample information is recorded and cross-referenced with current or previous tests.</li> <li>Universal precautions and relevant legislative requirements are observed during the handling and storage of all samples.</li> <li>Samples requiring analysis by laboratory are recorded and forwarded.</li> <li>Unwanted samples are disposed as directed.</li> </ul>
FPPTST1A.2 Prepare for sample collection.	<ul> <li>The type of required sample is confirmed prior to collection.</li> <li>Prescribed procedures to ensure representative sampling are followed and details recorded.</li> <li>Appropriate sampling equipment is prepared or assembled.</li> </ul>
FPPTST1A.3 Collect samples.	<ul> <li>Samples are collected in accordance with procedures.</li> <li>Sample integrity is preserved throughout all aspects of sampling.</li> <li>Samples are labelled for identification.</li> <li>Samples are stored in accordance with relevant regulations and procedures.</li> <li>Sampling equipment is maintained in a clean and safe, and if appropriate, sterile state.</li> <li>Unusual or non-standard observations made during sampling are recognised and reported.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPTST1A.4 Prepare samples and test equipment.	<ul> <li>Samples are identified and their history confirmed from relevant documentation.</li> <li>Equipment appropriate to the chosen sampling technique is prepared and assembled.</li> <li>Appropriate actions are taken to prevent or minimise loss or deterioration of material.</li> <li>Confirmation of the nature of the sample and of the required test procedures is obtained.</li> <li>The relevant test equipment is set up and calibration confirmed.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPTST1A.5 Perform tests and procedures.	<ul> <li>Tests to observe product properties are performed.</li> <li>Data is compared with standards or other reference materials and results recorded, with appropriate reporting procedures followed.</li> <li>Tests are completed within the required timeframe.</li> <li>Specimen collections are maintained.</li> <li>Work is completed within OH&amp;S, SOP, environmental and safe working requirements and practices.</li> </ul>
FPPTST1A.6 Record results.	<ul> <li>Data is recorded using appropriate worksheets and/or information systems.</li> <li>Instrument readouts and data are converted into a form suitable for interpretation using given formulae or conversion factors.</li> <li>Results are compared with product specifications or other quality control information and non-conformance is reported.</li> </ul>

- Collects representative samples, and prepares, preserves and stores them following standard procedures and maintaining sample integrity.
- Accurately documents all pertinent sample information in the required format.
- Collects, receives, handles and stores specimens in accordance with laboratory procedures, universal precautions and legislative requirements.
- Prepares samples and sub-samples to laboratory procedures.
- Follows correct disposal procedures.
- Recognises and, as required, maintains sampling equipment.
- Conducts tests to laboratory procedures.
- Records and presents data accurately.
- Confirms data complies with quality control limits.
- Demonstrates safe work practices.

### **WORKPLACE ASSESSMENT**

UNITS	
FPPASR1A	Conduct assessment in accordance with an established assessment procedure.
FPPASR2A	Plan and review assessment (extension unit).
FPPASR3A	Develop assessment tools (specialist unit).
FPPASR4A	Design the assessment system (specialist unit).
FPPASR5A	Establish the assessment system (specialist unit).
FPPASR6A	Manage the assessment system (specialist unit).

The distinctive features of the industry's and each enterprise's workplace assessment system can be expressed in the following statements.

### Assessment system including:

- · the purpose of assessment
- · competencies and certification required of assessors
- · record keeping procedures and policies
- any allowable adjustments to the assessment method(s) which are to be made for the person(s) being assessed who have special needs
- the appeal/review mechanisms and procedures
- the review and evaluation process
- the linkages between assessment and training qualifications/awards, employee classification, remuneration, progression
- · relevant policies
- quality assurance procedures
- apportionment of costs/fees (if applicable)
- marketing/promotion of assessment.

### Assessment procedures including:

- · recording procedure
- appeal/review mechanism
- assessment methods to be used
- number of assessors
- assessment tools
- evidence required
- location of assessment
- timing of assessment
- assessment group size
- allowable adjustments for persons with special needs.

### Purpose of assessment including:

- diagnosing performance
- classifying an employee in terms of a skills-based award
- confirming an employee's competency for the purposes of career advancement/job level
- awarding a qualification
- providing a statement of attainment
- confirming progress in learning
- recognising prior learning.

#### Assessment conducted by:

- · an assessor working on his/her own
- a team comprising subject knowledge expert(s) and assessment expert(s)
- an assessor working in conjunction with the trainer, supervisor, mentor of the person(s) being assessed or with a more experienced assessor.

#### Assessment methods including:

- direct observation of performance or product
- practical tasks
- projects
- written/oral questioning
- · simulation exercise
- · consideration of third party reports
- self assessment
- consideration of authenticated prior achievement
- combination of methods

#### Evidence gathering tools including:

- specific instructions to be given relating to the performance of practical tasks or processes or simulation exercises
- specific instructions to be given in relation to the production projects and exercises
- sets of oral/written/computer-based questions to be asked
- performance checklists
- · log books
- · marking guides.

A number of these tools may be used in combination in order to provide enough evidence to make a judgement.

### **Assessment location including:**

- in the workplace
- in a training establishment/centre
- in a simulated workplace
- · or in a combination of locations.

### Assessment may occur:

- on-the-iob
- or in a combination of on and off-the-job situations.

#### Assessment group size

Assessment may involve assessing one person or a group of people.

### Special needs of person(s) being assessed including:

Person(s) being assessed may have special needs. Reasonable adjustments may need to be made in the assessment process. Candidates with special needs may include those with disabilities or with literacy, numeracy or language difficulties, those who come from non-English speaking backgrounds, or anxious or inexperienced candidates.

Examples of reasonable adjustments include provision of personal support services (eg. Auslan interpreter, reader, interpreter, attendant carer, scribe), use of special equipment (eg. word processor or lifting gear) or adaptive technology, shorter assessment sessions to allow for fatigue or medication, use of large print version of any papers.

### Review procedures and review responsibilities including provision for:

- · continuous monitoring and improvement
- periodic formal evaluation
- a combination of continuous monitoring and formal evaluation.

### Review responsibilities of the assessor may be specified in the assessment system and include: [excludes Unit FPPASR1A]

- reviewing the assessment procedure at a specific site (enterprise or training establishment) and then making recommendations for improvement
- reviewing the assessment procedure conducted across sites (enterprises or training establishments) and then making improvements
- reporting challenges to assessment decisions to the appropriate person(s)
- reporting to the appropriate person(s) any difficulties or unusual occurrences in conducting the assessment and then making recommendations for improvement.

### Review activities should take into account the following aspects:

- · number of persons being assessed
- · duration of assessment procedure
- organisational constraints within which assessors must operate
- occupational health and safety factors
- · relationship of the assessor to other people in the assessment process
- frequency of assessment procedure
- budgetary restraints
- · information needs of relevant organisations such as affirmative action agencies
- effective operation of each component of the assessment system or procedure
- support needs and further training needs of assessors
- the validity of specified evidence requirements, assessment methods and instruments
- special needs consideration of person(s) being assessed
- industrial relations implications
- consistency of assessment practices and decisions
- levels of flexibility in the assessment procedure used
- fairness of the assessment procedure used
- efficiency and effectiveness of the assessment procedure.

### Characteristics of assessee which may need to be taken into account include:

- language, literacy and numeracy levels
- cultural background
- non-English speaking background
- disabilities
- shift worker
- older employees
- gender
- experience in assessment
- nervousness or anxiety.

### Appropriateness of evidence types may include:

- · cost effectiveness
- practicability
- communication skills of person(s) being assessed
- assessment experience and special needs of person(s) being assessed.

### Assessment policies may include:

- · purposes of assessment
- · industrial relations issues
- · what and who is to be assessed
- timing of assessments
- · links with other human resources functions
- record keeping requirements
- · recognition of prior learning
- · development costs and resources
- evaluation.

### Relevant parties associated with assessment may include:

- assessors
- · person(s) being assessed
- union representatives
- joint consultative committees
- users of assessment information such as training providers, employers, human resource departments
- State Training Authorities.

### Operational constraints to assessment may include:

- time available for assessment
- · relative cost of evidence gathering strategies
- · availability of assessors
- · availability of experts in the vocational area to be assessed
- availability of person(s) being assessed because of matters such as rosters, shift work
- · geographical location of person(s) being assessed.

### Assessment record systems may include:

- · paper-based systems
- · computer-based systems using magnetic or optical storage
- combination of both paper and computer-based systems.

NB: Statutory and legislative requirements for maintaining records may vary.

# Unit FPPASR1A: Conduct Assessment in Accordance with an Established Assessment Procedure

ELEMENTS	PERFORMANCE CRITERIA
FPPASR1A.1 Identify and explain the context of assessment.	<ul> <li>Discuss the context and purpose of assessment with the person(s) being assessed and confirm that it is understood.</li> <li>Obtain and explain to the person(s) being assessed the relevant performance measures applying to assessment (eg. current endorsed competency standards, learning outcomes of the training program). Instructions are verified by person(s) being assessed.</li> <li>Explain and obtain agreement for the assessment procedure.</li> <li>Identify and explain any legal and ethical responsibilities associated with assessment to the person(s) being assessed.</li> <li>Check whether the person(s) being assessed requires the allowable adjustments in the assessment procedure applying to those with special needs.</li> </ul>
FPPASR1A.2 Plan evidence gathering opportunities.	<ul> <li>Identify opportunities to gather evidence of competency which occur as part of workplace or training activities.</li> <li>Identify the need to gather additional evidence which may not occur as part of workplace or training activities.</li> <li>Plan and schedule all evidence gathering activity in accordance with the assessment procedure.</li> <li>Ensure that the planned approach to gathering evidence will provide sufficient, reliable, valid and fair evidence of competency.</li> <li>Ensure that the planned approach to gathering evidence will cover the four key dimensions of competence:         <ul> <li>task skills</li> <li>task management skills</li> <li>contingency management skills</li> <li>job/role environment skills.</li> </ul> </li> </ul>
FPPASR1A.3 Organise assessment.	<ul> <li>Obtain and arrange the resources specified in the assessment procedure.</li> <li>Inform the relevant people of assessment plans.</li> <li>Check that the assessment environment permits fair, valid and reliable assessment.</li> <li>Check that the assessment environment is safe and accessible.</li> <li>Explain the assessment arrangements and requirements simply and clearly to the person(s) being assessed.</li> <li>Obtain agreement regarding assessment arrangements with person(s) being assessed.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPASR1A.4 Gather evidence.	<ul> <li>Put the person(s) being assessed at ease.</li> <li>Gather all the evidence specified in the assessment procedure, using assessment methods and tools specified.</li> <li>Gather evidence for those with special needs, in accordance with specified allowable adjustments to the assessment method(s).</li> <li>Document the evidence gathered in accordance with the assessment procedure.</li> </ul>
FPPASR1A.5 Make the assessment decision.	<ul> <li>Evaluate the evidence gathered in terms of its:         <ul> <li>validity</li> <li>authenticity</li> <li>sufficiency</li> <li>currency</li> <li>consistent achievement of the specified standard.</li> </ul> </li> <li>Make the assessment decision in accordance with the criteria specified in the assessment procedure.</li> <li>Seek guidance, if in doubt, from a more experienced assessor(s) nominated in the assessment procedure.</li> </ul>
FPPASR1A.6 Record assessment results.	<ul> <li>Record assessment results promptly and in accordance with the specified assessment procedure.</li> <li>Record assessment results accurately in accordance with the specified record keeping requirements.</li> <li>Provide access to the assessment records only to authorised personnel.</li> <li>Maintain confidentiality of assessment outcome.</li> </ul>
FPPASR1A.7 Provide feedback to person(s) being assessed.	<ul> <li>Discuss and confirm performance with the person(s) being assessed.</li> <li>Give clear and constructive feedback to the person(s) being assessed.</li> <li>Explore with the person(s) being assessed ways of overcoming any gaps in their competency revealed by assessment.</li> <li>Give guidance on further goals/training opportunities, if appropriate.</li> <li>Advise and confirm with person(s) being assessed reassessment opportunities and/or review appeal mechanisms available where the assessment decision is challenged.</li> </ul>
FPPASR1A.8 Report on the conduct of the assessment.	<ul> <li>Report on positive and negative features experienced in conducting assessment to those responsible for the assessment procedure.</li> <li>Record and report promptly any assessment decision disputed by the person(s) being assessed to those nominated in the assessment procedure.</li> <li>Make suggestions for improving any aspect of the assessment process to those responsible for the assessment procedure.</li> </ul>

### **EVIDENCE GUIDE**

Evidence of satisfactory performance should be obtained by observation of the "assessor" preparing for and conducting assessment as well as examination of completed assessment records. This should be supplemented by discussion about the assessment procedure with the "assessor" and the person(s) being assessed.

#### Look for demonstration of:

- understanding of the range of assessment purposes and assessment contexts and the implications of these for the person being assessed
- understanding of the concepts of validity, authenticity, sufficiency, currency, cost effectiveness and consistency as they apply to evidence gathering
- knowledge of the assessment principles included in the National Framework for Recognition of Training (NFROT) Agreement
- knowledge of all aspects of the assessment procedure established by the industry, enterprise or training establishment/authority
- knowledge of any legal and ethical responsibilities associated with the assessment procedure such as licensing requirements, equal employment opportunity, disability discrimination and occupational health and safety
- knowledge of relevant health and safety standards to be observed in the assessment process
- knowledge of modifications in the assessment procedure to be applied in the assessment of a person with special needs
- use of appropriate communication and interpersonal skills.

### Unit FPPASR2A: Plan and Review Assessment (Extension Unit)

ELEMENTS	PERFORMANCE CRITERIA
FPPASR2A.1 Establish evidence required.	<ul> <li>Establish the evidence required to infer competency from the endorsed competency standards, learning outcomes of the training program or other performance measures used.</li> <li>Specify evidence requirements to assure valid inferences of competency.</li> <li>Specify evidence requirements for the assessor to authenticate the performance/product of the person(s) being assessed.</li> <li>Specify sufficient evidence on which to base valid inferences.</li> <li>Specify evidence requirements which will confirm that competency is current.</li> <li>Specify sufficient evidence to show consistent achievement of the specified standards.</li> <li>Identify opportunities to consolidate evidence gathering activity.</li> <li>Establish the cost of gathering the required evidence.</li> </ul>
FPPASR2A.2 Establish suitable assessment method(s).	<ul> <li>Select assessment methods which are appropriate for gathering the type and amount of evidence required.</li> <li>Propose suitable adjustments in the assessment method to cater for those person(s) being assessed who have special needs.</li> </ul>
FPPASR2A.3 Develop simple assessment tools.	<ul> <li>Design an assessment tool(s) which gathers:         <ul> <li>valid evidence</li> <li>reliable evidence or complements the use of other assessment tools in gathering sufficient evidence.</li> </ul> </li> <li>Design an assessment tool which is clear and comprehensible both to those conducting the assessment and to those being assessed.</li> <li>Verify that the assessment tool permits flexible, fair and safe assessment to occur.</li> <li>Verify that the assessment tool is cost-effective in gathering required evidence.</li> <li>Prepare accompanying instructions for use specifying any adjustments which can be made to address the requirements of people being assessed who have special needs.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPASR2A.4 Review evidence requirements, assessment methods and assessment tools.	<ul> <li>Trial assessment methods and assessment tools with people similar to those who will ultimately be assessed.</li> <li>Evaluate the assessment methods and tools for:         <ul> <li>clarity</li> <li>reliability</li> <li>validity</li> <li>fairness</li> <li>cost effectiveness</li> </ul> </li> <li>Make improvements and changes to the assessment method and assessment tools in the light of the evaluation of the pilot exercise.</li> <li>Ratify procedures with relevant people in the industry/enterprise or training establishment of the evidence requirements, assessment methods and assessment tools and the process used in developing them.</li> </ul>
FPPASR2A.5 Periodically review the assessment procedures.	<ul> <li>Comply with the review process established by the enterprise, industry or training authority.</li> <li>Review the operations of the assessment procedure at a specified site in co-operation with person(s) being assessed, and any relevant parties in industry/the enterprise/the training establishment and/or any agency identified under legislation.</li> <li>Document and evaluate review activities and substantiate review findings.</li> <li>Make recommendations for changes to the assessment procedure in the light of the review outcomes to the appropriate person(s).</li> <li>Make effective contributions to system-wide reviews of the assessment process.</li> </ul>

Evidence of satisfactory performance in this Unit should be obtained by an examination of the plans and documents prepared by the "assessor" and discussion with the "assessor" about the selection of evidence required, choice of assessment methods and proposed assessment tool(s). Evidence of satisfactory performance of the review function should be obtained by examining review documentation including data gathering exercises, analysis and reporting of data, and the quality of contributions to process improvements.

#### Look for demonstration of:

- understanding of the range of assessment purposes and assessment contexts and the implications of these for the person being assessed
- understanding of the concepts of validity, reliability, authenticity, sufficiency, currency, cost effectiveness and consistency as they apply to evidence gathering
- knowledge of different types of assessment methods, their suitability for gathering various types of evidence and the cost and other implications of their use
- knowledge of the assessment principles included in the National Framework for Recognition of Training Agreement
- knowledge of all aspects of the assessment system established by the industry, enterprise
  or training authority
- knowledge of any legal and ethical responsibilities associated with the assessment system such as licensing requirements, equal employment opportunity, disability discrimination and occupational health and safety
- knowledge of relevant health and safety standards to be observed in the assessment procedure
- knowledge of modifications in the assessment procedure(s) to be applied in the assessment of a person with special needs
- knowledge of review process and procedures established by the industry, enterprise training authority
- knowledge of basic evaluation methodologies suitable for reviewing the implementation, appropriateness, efficiency and effectiveness of the assessment process.

### Unit FPPASR3A: Develop Assessment Tools (Specialist Unit)

ELEMENTS	PERFORMANCE CRITERIA
FPPASR3A.1 Identify appropriate assessment tools.	<ul> <li>Determine the range of available assessment tools appropriate to assessment contexts and characteristics of person(s) being assessed.</li> <li>Identify any shortfall or inadequacies in the range of relevant assessment tools available.</li> <li>Identify and select assessment tools consistent with assessment purposes and procedures.</li> <li>Determine the nature and range of reasonable adjustment allowed for each assessment tool.</li> </ul>
FPPASR3A.2 Assemble assessment tools.	<ul> <li>Design or modify existing assessment tools so that their format, language, literacy and numeracy requirements are appropriate to the characteristics of the assessors, person being assessed and the assessment context.</li> <li>Verify that the assessment tools maintain validity but are easy to administer and allow sufficient flexibility to meet the range of possible assessment contexts.</li> <li>Verify that the assessment tools designed and/or selected are valid and maximise reliability, flexibility and fairness.</li> <li>Modify existing assessment tools when required to meet the particular assessment needs of assessors, person(s) being assessed and the particular contexts in which assessment is to be conducted.</li> </ul>
FPPASR3A.3 Trial and review assessment tools.	<ul> <li>Identify the criteria by which the outcomes of trials will be evaluated.</li> <li>Determine representative groups for trial assessment events.</li> <li>Conduct trials and seek responses from all involved parties.</li> <li>Compile and analyse responses from trials.</li> <li>Modify assessment tool(s) based on the responses to the trials.</li> </ul>

Evidence of satisfactory performance should be obtained by examination of the assessment tools and discussion of the tools with the "assessor" and those previously assessed.

#### Look for:

- why the particular tools were chosen and their relationship to competency standards
- how effective the tools are in obtaining valid and reliable assessment
- appropriateness of assessment tools in regard to language, literacy and numeracy
- knowledge of evaluation methodologies appropriate to the trialing and review of assessment system tools
- knowledge of evaluation criteria appropriate to the trial(s)
- the evaluation results of the trial(s) from the assessors, those assessed and the organisation's perspective
- any changes in the tools that were made arising from the evaluation outcomes or the trial(s)
- ease of use and cost effectiveness of the tools.

## Unit FPPASR4A: Design the Assessment System (Specialist Unit)

ELEMENTS	PERFORMANCE CRITERIA
FPPASR4A.1 Determine assessment boundaries.	<ul> <li>Develop an assessment policy in consultation with relevant parties.</li> <li>Establish mechanisms to enable consultation and negotiation of the assessment system to occur among all relevant parties.</li> <li>Establish the purpose(s) for which assessment is to be conducted.</li> <li>Identify applicable competency standards relevant to the assessment criteria.</li> <li>Determine the requirements and needs of potential candidates.</li> <li>Determine the financial, physical and human resources available to support the assessment system.</li> <li>Verify that the assessment system developed takes into account the realities and constraints of particular assessment contexts.</li> </ul>
FPPASR4A.2 Establish assessment system features.	<ul> <li>Determine with relevant parties the key operational features of the assessment system including:         <ul> <li>the purpose of assessment</li> <li>competencies and certification required of assessors</li> <li>record keeping procedures and policies</li> <li>any allowable adjustments to the assessment methods which are to be made for persons being assessed who have special needs</li> <li>the appeal/review mechanisms and procedures</li> <li>the review and evaluation process</li> <li>the linkages between assessment and training qualifications/awards, employee classification, remuneration, progression</li> <li>relevant policies</li> <li>quality assurances procedures</li> <li>apportionment of costs/fees (if applicable)</li> <li>marketing/promotion of assessment.</li> </ul> </li> <li>Verify that the features result in a fair, equitable and accessible assessment system.</li> <li>Document the agreed features of the assessment system.</li> </ul>
FPPASR4A.3 Identify and select available sources of assessment evidence.	<ul> <li>Select evidence type(s) relevant to the competencies being assessed.</li> <li>Choose the evidence types which are appropriate to the assessment contexts and meet operational constraints.</li> <li>Select evidence sources with regard to sufficiency, currency consistency and authenticity.</li> <li>Choose evidence types that take into account the identified characteristics of person(s) to be assessed and any adjustments to be made for those with special needs.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPASR4A.4 Determine appropriate evidence gathering processes.	<ul> <li>Seek advice from all relevant parties on the most effective procedures for collecting evidence.</li> <li>Establish procedures for the collection of evidence which are feasible, cost-effective and practicable.</li> <li>Verify that the evidence gathering process is fair and equitable and accessible to all.</li> </ul>

Evidence of satisfactory performance in this Unit should be obtained by examination of the assessment system and discussion of the system with the developer(s) about the determination of the assessment system boundaries, the selection of the range of assessment evidence, the proposed assessment procedures, and their appropriateness to the assessment system developed.

#### Look for:

- how the assessment boundaries were determined and how they are reflected in the assessment system developed
- the range of assessment processes chosen or designed and how the evidence drawn out by these match the competency standards
- · documentation of the assessment system
- the feasibility, cost-effectiveness and practicability of evidence collection methods used in assessment processes
- fairness and equity
- accessibility of the assessment process to person(s) being assessed.

## Unit FPPASR5A: Establish the Assessment System (Specialist Unit)

ELEMENTS	PERFORMANCE CRITERIA
FPPASR5A.1 Design and develop an assessment record keeping system.	<ul> <li>Design an assessment record keeping system which is secure, confidential and easy to administer, yet allows the storage of complex or detailed information.</li> <li>Design the records system to allow easy tracking of candidates' progress towards qualifications or competency standards or attainment of learning outcomes.</li> <li>Verify that the records system allows for appropriate certification requirements where relevant.</li> <li>Verify that the records system meets legislative requirements for record keeping.</li> <li>Verify that the assessment record keeping system is consistent with accepted enterprise/organisation procedures for record keeping.</li> <li>Establish procedures which enable the record keeping system to be updated with ease when required.</li> </ul>
FPPASR5A.2 Establish procedures for the review of assessment decisions.	<ul> <li>Develop assessment review procedures in consultation with all relevant parties.</li> <li>Document the assessment review procedures and make them available to all relevant parties.</li> <li>Ensure that the assessment review procedures allow for fair and consistent responses to grievances.</li> </ul>
FPPASR5A.3 Select and provide for training of assessors.	<ul> <li>Establish selection criteria for choosing assessors in consultation with relevant parties.</li> <li>Design or choose appropriate training strategies or programs for assessors to acquire or update competencies which take into account current assessment competency standards.</li> <li>Verify that assessment training programs developed or selected are based on current assessment competency standards.</li> </ul>
FPPASR5A.4 Establish quality assurance procedures.	<ul> <li>Establish quality assurance team or committee from relevant parties.</li> <li>Develop quality assurance procedures in consultation with all relevant parties.</li> <li>Trial the quality assurance procedures to establish fairness, efficiency, and effectiveness.</li> <li>Document and communicate the quality assurance procedures to assessors and all other relevant parties involved in the assessment process.</li> </ul>

Evidence of satisfactory performance in this Unit should be obtained by examination of the assessment system and the record keeping system, as well as discussion of the system with the "assessor" and other relevant parties about the assessment review procedures, the training of assessors and the quality assurance procedures.

#### Look for:

- the choice of record keeping system, its suitability for the competencies being assessed, its ease of operation and how well it meets organisational and legislative requirements for record keeping
- the security of the record keeping system
- · how well the review of assessment decisions ensures fairness and equity for all parties
- the selection criteria used for assessors
- the quality of the training provided for assessors
- the consultative process undertaken in establishing the quality assurance procedures
- the documentation of the quality assurance procedures
- the assessor's knowledge and understanding of the quality assurance procedures
- the nature of the quality assurance procedures implemented.

## Unit FPPASR6A: Manage the Assessment System (Specialist Unit)

ELEMENTS	PERFORMANCE CRITERIA
FPPASR6A.1 Manage the record keeping system.	<ul> <li>Maintain records that are current and meet legislative and organisational requirements.</li> <li>Ensure that the record keeping system maintains confidentiality and is secure.</li> <li>Instigate changes to the record keeping system as they occur due to changing technology and requirements.</li> </ul>
FPPASR6A.2 Communicate the selected assessment system.	<ul> <li>Document the assessment system and procedures and circulate to all relevant parties.</li> <li>Establish procedures for keeping people informed regularly about the key features of the assessment system.</li> <li>Develop procedures for communicating the assessment system to all relevant parties.</li> </ul>
FPPASR6A.3 Support assessors.	<ul> <li>Ensure that assessors meet the current assessment competency standards.</li> <li>Manage and provide assessors with ongoing support.</li> <li>Identify and make provision for meeting training needs of assessors arising from their assessment role.</li> <li>Develop procedures for assessors to update competence and to review and reflect on their assessment work.</li> <li>Provide assessors with accurate advice and support to meet their professional development needs.</li> <li>Assist assessors with arrangements for candidates with special assessment requirements.</li> <li>Establish procedures to facilitate networking amongst assessors.</li> </ul>
FPPASR6A.4 Maintain quality assurance procedures.	<ul> <li>Moderate and monitor assessment decisions.</li> <li>Conduct regular reviews of the assessment system.</li> <li>Sample judgements of evidence and assessment decisions regularly against competency standards to check their fairness and accuracy.</li> <li>Evaluate the assessment system on a periodic basis.</li> <li>Modify the assessment system on the basis of evaluations and reviews.</li> </ul>

Evidence of satisfactory performance in this Unit should be obtained by examination of the assessment system and the associated record keeping system, as well as discussion of the system with the "assessor" and other relevant parties about the management of the record keeping system, the effectiveness of communicating the assessment system and the maintenance of quality assurance procedures.

#### Look for:

- · maintenance of security and records
- · currency of records and ease of retrieval
- support given to the implementation of quality assurance procedures
- any networking amongst assessors
- opportunities provided for assessors to practise and maintain current competence
- the implementation of evaluation and validation procedures
- internal/external reviews of the assessment system
- procedures for promoting and communicating the assessment system to all relevant parties and evaluation of the effectiveness of the procedures
- · modifications made to the assessment systems on the basis of evaluations and review
- an ongoing monitoring process.

### WORKPLACE LEADERSHIP

UNITS		
FPPLDR1A	Manage personal work priorities and professional development.	
FPPLDR2A	Provide leadership in the workplace.	
FPPLDR3A	Establish and manage effective workplace relationships.	
FPPLDR4A	Participate in, lead and facilitate work team.	
FPPLDR5A	Manage operations to achieve planned outcomes.	
FPPLDR6A	Manage workplace information.	
FPPLDR7A	Manage quality customer service.	
FPPLDR8A	Develop and maintain a safe workplace and environment.	
FPPLDR9A	Implement and monitor continuous improvement systems and processes.	
FPPLDR10A	Facilitate and capitalise on change and innovation.	
FPPLDR11A	Contribute to the development of a workplace learning environment.	

### **RANGE STATEMENT**

### Frontline management will normally operate in a workplace environment in which use is made of the organisation's:

- goals, objectives, plans, systems and processes
- business and performance plans
- ethical standards
- · quality and continuous improvement processes and standards
- · defined resource parameters
- access and equity principles and practices
- · workplace agreements

### Legislation, codes and national standards relevant to the workplace, particularly those involved with:

- workplace safety
- environmental safety
- · employee conditions

#### A range of learning opportunities may be used, for example:

- mentoring
- coaching
- exchange/rotation
- · action learning
- shadowing
- · structured training programs
- flexible delivery arrangements

#### Teams may be one or a mixture of:

- on-going
- · project-based
- work-based
- · cross-functional

#### Teams may include:

- full time employees
- · part time employees
- contractors

#### Frontline management roles in teams may include:

- leader
- coach
- facilitator
- mentor
- participant

#### Customers and suppliers may be:

- internal or external
- drawn from existing or new sources

### Resources may include:

- people
- finance
- equipment
- power/energy

- buildings/facilities
- technology
- information
- time

### **Unit FPPLDR1A: Manage Personal Work Priorities and Professional Development**

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR1A.1 Manage self.	<ul> <li>Personal qualities and performance serves as a role model in the workplace.</li> <li>Personal goals and plans reflect the organisation's plans, and personal roles, responsibilities and accountabilities.</li> <li>Action is taken to achieve and extend personal goals beyond those planned.</li> <li>Consistent personal performance is maintained in varying work conditions and work contexts.</li> </ul>
FPPLDR1A.2 Set and meet own work priorities.	<ul> <li>Competing demands are prioritised to achieve personal, team and the organisation's goals and objectives.</li> <li>Technology is used efficiently and effectively to manage work priorities and commitments.</li> </ul>
FPPLDR1A.3 Develop and maintain professional competence.	<ul> <li>Personal knowledge and skills is assessed against competency standards to determine development needs and priorities.</li> <li>Feedback from clients and colleagues is used to identify and develop ways to improve competence.</li> <li>Development opportunities suitable to personal learning style(s) are selected and used to develop competence.</li> <li>Participation in professional networks and associations enhances personal knowledge, skills and relationships.</li> <li>New skills are identified and developed to achieve and maintain a competitive edge.</li> </ul>

- Operates in diverse work environments and contexts
- · Acquires and uses information appropriate to work responsibility
- · Achieves personal and organisational goals and results
- · Makes decisions within responsibility and authority
- Develops a clear set of work goals
- Monitors/introduces practices to improve own performance
- Develops competencies which enable increased participation in the planning and development of the organisation
- · Assesses own performance
- Plans learning activities and negotiates priorities
- Seeks feedback and acts on constructive advice
- Selects and uses available learning methods to maintain current competence
- Uses information systems
- Selects and uses available technology appropriate to the task

## Unit FPPLDR2A: Provide Leadership in the Workplace

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR2A.1 Model high standards of management performance.	<ul> <li>Performance meets the organisation's requirements.</li> <li>Performance serves as positive role model for others.</li> <li>Performance plans are developed and implemented in accordance with the organisation's goals and objectives.</li> <li>Key performance indicators are developed within the team's/organisation's business plans.</li> </ul>
FPPLDR2A.2 Enhance the organisation's image.	<ul> <li>The organisation's standards and values are used.</li> <li>Standards and values considered to be damaging to organisation are questioned through established communication channels.</li> <li>Personal performance contributes to developing an organisation which has integrity and credibility.</li> </ul>
FPPLDR2A.3 Influence individuals and teams positively.	<ul> <li>Expectations, roles and responsibilities are communicated in a way which encourages individuals/teams to take responsibility for their work.</li> <li>Individual's/team's efforts and contributions are encouraged, valued and rewarded.</li> <li>Ideas and information receive the acceptance and support of colleagues.</li> </ul>
FPPLDR2A.4 Make informed decisions.	<ul> <li>Information relevant to the issue(s) under consideration is gathered and organised.</li> <li>Individuals/teams participate actively in the decision making processes.</li> <li>Options are examined and their associated risks assessed to determine preferred course(s) of action.</li> <li>Decisions are timely and communicated clearly to individuals/teams.</li> <li>Plans to implement decisions are prepared and agreed by relevant individuals/teams.</li> <li>Feedback processes are used effectively to monitor the implementation and impact of decisions.</li> </ul>

- · Achieves planned results
- · Acquires and uses information appropriate to work responsibility
- Makes decisions within responsibility and authority
- Explains the organisation's goals, values and objectives
- Establishes and monitors Key Performance Indicators for individuals/teams
- · Achieves goals and results
- Monitors/introduces practices to improve performance
- · Operates effectively in diverse work environments and contexts
- Uses modern management techniques in work performance
- Uses effective consultative processes
- Communicates routine and non-routine information clearly to senior managers, peers and subordinates
- Promotes available learning methods to support colleagues' competence
- Uses information systems
- Selects and uses available technology appropriate to the task

## Unit FPPLDR3A: Establish and Manage Effective Workplace Relationships

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR3A.1 Gather, convey and receive information and ideas.	<ul> <li>Information to achieve work responsibilities is collected from appropriate sources.</li> <li>The method(s) used to communicate ideas and information is appropriate to the audience.</li> <li>Communication takes into account social and cultural diversity.</li> <li>Input from internal and external sources is sought, and valued in developing and refining new ideas and approaches.</li> </ul>
FPPLDR3A.2 Develop trust and confidence.	<ul> <li>People are treated with integrity, respect and empathy.</li> <li>The organisation's social, ethical and business standards are used to develop and maintain positive relationships.</li> <li>Trust and confidence of colleagues, customers and suppliers is gained and maintained through competent performance.</li> <li>Interpersonal styles and methods are adjusted to the social and cultural environment.</li> </ul>
FPPLDR3A.3 Build and maintain networks and relationships.	<ul> <li>Networking is used to identify and build relationships.</li> <li>Networks and other work relationships provide identifiable benefits for the team and organisation.</li> <li>Cross-cultural co-operation results in positive outcomes for individuals, teams and organisation.</li> <li>Coaching and mentoring is used to assist colleagues develop effective relationships in a diverse workplace.</li> </ul>
FPPLDR3A.4 Manage difficulties to achieve positive outcomes.	<ul> <li>Problems are identified and analysed, and action is taken to rectify the situation with minimal disruption to performance.</li> <li>Colleagues receive guidance and support to resolve their work difficulties.</li> <li>Continued poor performance is managed within the organisation's processes.</li> <li>Differences are handled and agreements are completed within the organisation's processes.</li> <li>Difficult situations are negotiated to achieve results acceptable to the participants, and which meet organisation and legislative requirements.</li> </ul>

- Uses information appropriate to work responsibility
- Achieves goals/results
- Monitors and introduces ways to improve work relationships
- Performs in a way which strengthens and reinforces relationships
- Develops effective relationships in internal and external environments
- Communicates clearly and concisely
- Responds effectively to unexpected demands from a range of sources
- Provides honest and constructive feedback
- Uses effective consultative processes
- Encourages contrary views to be submitted and discussed
- Treats people openly and fairly
- · Develops constructive responses when confronted with problems and difficulties
- Uses information systems
- Selects and uses available technology appropriate to the task

### Unit FPPLDR4A: Participate In, Lead and Facilitate Work Team

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR4A.1 Participate in team planning.	<ul> <li>The team establishes clearly defined purpose, roles, responsibilities and accountabilities within the organisation's goals and objectives.</li> <li>The team performance plan contributes to the organisation's business plan, policies and practices.</li> <li>The team agrees to processes to monitor and adjust its performance within the organisation's continuous improvement policies.</li> <li>The team includes in its plans ways in which it can benefit from the diversity of its membership.</li> </ul>
FPPLDR4A.2 Develop team commitment and cooperation.	<ul> <li>The team uses open communication processes to obtain and share information.</li> <li>The team encourages and exploits innovation and initiative.</li> <li>Support is provided to the team to develop mutual concern and camaraderie.</li> </ul>
FPPLDR4A.3 Manage and develop team performance.	<ul> <li>The team is supported in making decisions within its agreed roles and responsibilities.</li> <li>The results achieved by the team contribute positively to the organisation's business plans.</li> <li>Team and individual competencies are monitored regularly to confirm that the team is able to achieve its goals.</li> <li>Mentoring and coaching supports team members enhance their knowledge and skills.</li> <li>Performance is monitored to confirm that work has been completed.</li> </ul>
FPPLDR4A.4 Participate in, and facilitate the work team.	<ul> <li>Team effectiveness is encouraged and enhanced through active participation in team activities and communication processes.</li> <li>Individuals and teams are actively encouraged to take individual and joint responsibility for their actions.</li> <li>The diversity of individuals' knowledge and skills is used to enhance team performance.</li> <li>The team receives support to identify and resolve problems which impede its performance.</li> </ul>

- Acquires and uses information appropriate to work responsibility
- Establishes among teams a commitment to the organisation's goals, values and plans
- Achieves goals and results
- Makes decisions within responsibility and authority
- · Provides clear direction in devolving responsibility and accountability
- Provides constructive feedback to delegates
- Monitors/proposes ways to improve team performance
- Works effectively with team members who have diverse work styles, aspirations, cultures and perspectives
- Uses effective consultative processes
- Encourages teams to openly propose, discuss and resolve issues
- Deals with conflict before it adversely affects team performance
- Treats people openly and fairly
- Supports team to share knowledge and skills
- Promotes available learning methods to support team
- Uses information systems
- Selects and uses available technology appropriate to the task

### Unit FPPLDR5A: Manage Operations to Achieve Planned Outcomes

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR5A.1 Plan resource use to achieve profit/ productivity targets.	<ul> <li>Resource information for use in operational plans is collected, analysed and organised in consultation with colleagues and specialist resource managers.</li> <li>Operational plans contribute to the achievement of the organisation's performance/business plan.</li> <li>Operational plans identify available resources, taking into account customer needs and the organisation's plans.</li> <li>Plans maximise the value gained from the diversity of the organisation's resources.</li> <li>Contingency plans are prepared in the event that initial plans need to be varied.</li> </ul>
FPPLDR5A.2 Acquire resources to achieve operational plan.	<ul> <li>Employees are recruited and inducted within the organisation's human resource management policies and practices.</li> <li>Physical resources and services are acquired in accord with the organisation's practices and procedures.</li> </ul>
FPPLDR5A.3 Monitor operational performance.	<ul> <li>Performance systems and processes are monitored to assess progress in achieving profit/productivity plans and targets.</li> <li>Budget and actual financial information is analysed and interpreted to monitor profit/productivity performance.</li> <li>Unsatisfactory performance is identified and prompt action is taken to rectify the situation.</li> <li>Recommendations for variation to operational plans are negotiated and approved by the designated persons/</li> <li>groups.</li> </ul>
FPPLDR5A.4 Monitor resource usage.	<ul> <li>Systems and processes are monitored to establish whether resources are being used as planned.</li> <li>Problems with resource usage are investigated and rectified and/or reported to designated persons/groups.</li> <li>Mentoring and coaching is provided to support individuals/teams who have difficulties in using resources to the required standard.</li> <li>Systems, procedure and records associated with documenting resource acquisition and usage are managed in accordance with the organisation's requirements.</li> </ul>

- · Achieves goals and results
- · Acquires and uses information appropriate to responsibility
- Makes decisions within responsibility and authority
- Participates effectively in wider organisational processes which have an effect on operational performance
- Organises and uses resources to achieve business plans
- Provides input to the organisation's planning processes
- Eliminates/minimises resource inefficiencies and waste
- Creates products/services which are safe for customer use
- Develops alternative approaches to improve resource use
- Ensures that legislative requirements are met in work operations
- Prepares and negotiates recommendations to change operations
- Uses effective consultative processes
- Seeks feedback and acts on constructive advice
- Promotes available learning methods to assist colleagues
- Uses information systems
- Selects and uses available technology appropriate to the task
- Records/reports information within established systems

### **Unit FPPLDR6A: Manage Workplace Information**

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR6A.1 Identify and source information needs.	<ul> <li>The information needs of individuals/teams is determined and the sources are identified.</li> <li>Information held by the organisation is reviewed to determine suitability and accessibility.</li> <li>Plans are prepared to obtain information which is not available/accessible within the organisation.</li> </ul>
FPPLDR6A.2 Collect, analyse and report information.	<ul> <li>Collection of information is timely and relevant to the needs of individuals/teams.</li> <li>Information is in a format suitable for analysis, interpretation and dissemination.</li> <li>Information is analysed to identify and report relevant trends and developments in terms of the needs for which it was acquired.</li> </ul>
FPPLDR6A.3 Use information systems.	<ul> <li>Information systems are used effectively to store and retrieve data for decision making.</li> <li>Technology available in the work area/organisation is used to manage information efficiently and effectively.</li> <li>Recommendations for improving the information system are submitted to designated persons/groups.</li> </ul>
FPPLDR6A.4 Prepare business plans/budgets.	<ul> <li>Individuals/teams are involved in business plan/budget preparation in a way which uses their contribution effectively and gains their support for the outcomes.</li> <li>Business plans/budgets are prepared and presented in accordance with the organisation's guidelines and requirements.</li> <li>Contingency plans are prepared in the event that alternative action is required.</li> </ul>
FPPLDR6A.5 Prepare resource proposals.	<ul> <li>Resource planning data is collected in consultation with colleagues, including those who have a specialist role in resource management.</li> <li>Estimates of resource needs and utilisation reflects the organisation's business plans, and customer and supplier requirements.</li> <li>Proposals to secure resources are supported by clearly presented submissions describing realistic options, benefits, costs and outcomes.</li> </ul>

- · Achieves goals and results
- · Acquires and uses information appropriate to work responsibility
- Makes decisions within responsibility and authority
- Monitors/improves ways to manage information
- Explains basic financial concepts in business plans/budgets
- Prepares basic financial information within standard format
- Prepares resource proposals within budget constraints
- Prepares and negotiates recommendations to improve the organisation's information systems
- Ensures that legislative requirements are met in plans
- Promotes available learning methods to support colleagues
- Uses effective consultative processes
- Communicates with colleagues who have specialist responsibilities in financial and resource management
- · Uses information systems
- Selects and uses available technology appropriate to the task

### Unit FPPLDR7A: Manage Quality Customer Service

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR7A.1 Plan to meet internal and external customer requirements.	<ul> <li>The needs of customers are researched, understood, and assessed, and included in the planning process.</li> <li>Provision is made in plans to achieve the quality, time and cost specifications agreed with customers.</li> </ul>
FPPLDR7A.2 Ensure delivery of quality products/services.	<ul> <li>Products/services are delivered to customer specifications within the team's/organisation's business plan.</li> <li>Individual/team performance consistently meets quality, safety, resource and delivery standards.</li> <li>Coaching and mentoring assists colleagues overcome difficulty in meeting customer service standards.</li> </ul>
FPPLDR7A.3 Monitor, adjust and report customer service.	<ul> <li>The organisation's systems and technology are used to monitor progress in achieving product/service targets and standards.</li> <li>Customer feedback is sought and used to improve the provision of products/services.</li> <li>Resources are used effectively and efficiently to provide quality products/services to customers.</li> <li>Decisions to overcome problems with products/services are taken in consultation with designated individuals/groups.</li> <li>Adjustments are made to products/services, and those who have a role in their planning and delivery are informed of changes.</li> <li>Records, reports and recommendations are managed within the organisation's systems and processes.</li> </ul>

- · Achieves goals and results
- Manages products/services within budget constraints
- · Makes decisions within responsibility and authority
- · Acquires and uses information appropriate to work responsibility
- Monitors/introduces ways to improve products/services
- Uses effective consultative processes
- Ensures that legislation and standards are met
- Develops and maintains effective communication with customers
- · Seeks customer feedback and acts on constructive advice
- Treats people openly and fairly
- Promotes available learning methods to enable colleagues to maintain current competence
- Uses information systems
- Selects and uses available technology appropriate to the task

### Unit FPPLDR8A: Develop and Maintain a Safe Workplace and Environment

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR8A.1 Access and share legislation, codes and standards.	<ul> <li>Legislation, standards and the organisation's policies and practices relevant to the creation and maintenance of a safe workplace and environment are made available to individuals/teams.</li> <li>Arrangements are made to provide information in a language, style and format which is understood by colleagues.</li> <li>Individuals/teams know their legal responsibility for maintaining a safe workplace and environment.</li> <li>The implications of an unsafe workplace and environment is clear to all within the workplace.</li> </ul>
FPPLDR8A.2 Plan and implement safety requirements.	<ul> <li>Work practices are planned with colleagues to ensure compliance with workplace and environmental legislation and standards.</li> <li>Work practices are implemented in accordance with requirements specified in legislation and standards for safe workplaces and environments.</li> <li>Coaching and mentoring supports colleagues in managing their rights and responsibilities.</li> </ul>
FPPLDR8A.3 Monitor, adjust and report safety performance.	<ul> <li>Actual and potential problems are identified, rectified and reported promptly and decisively to ensure workplace and environmental safety.</li> <li>Hazards are managed so that risks are minimised.</li> <li>Waste recycling, reduction and disposal is carried out within legislative and organisational requirements.</li> <li>Recommendations to make improvements to comply with legislation and associated standards are submitted to designated persons/groups.</li> <li>Individuals/teams are informed of the results of improvement in the workplace.</li> <li>Systems, records and reporting procedures are maintained according to legislative requirements.</li> </ul>
FPPLDR8A.4 Investigate and report non-conformance.	<ul> <li>Non-conformance is investigated and dealt with according to legislative requirements.</li> <li>Coaching and mentoring supports colleagues to acquire and apply competencies to meet legislative requirements and the associated standards.</li> <li>Workplace practices are implemented to ensure that non-conformance is not repeated.</li> </ul>

- Develops/promotes a safety conscious culture in workplace
- · Provides a model to others in working safely
- Acquires and uses information appropriate to work responsibility
- Achieves goals and results
- Explains safety legislation, standards and procedures
- Maintains a safe workplace
- Takes prompt action to rectify/report non-compliance
- Prepares and negotiates recommendations to improve safety
- Monitors/introduces practices to ensure safety compliance
- Promotes available learning methods to support colleagues
- Uses information systems
- Selects and uses available technology appropriate to the task

# Unit FPPLDR9A: Implement and Monitor Continuous Improvement Systems and Processes

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR9A.1 Implement continuous improvement systems and processes.	<ul> <li>Team members are actively encouraged and supported to participate in decision making processes and to assume responsibility and authority.</li> <li>The organisation's continuous improvement processes are communicated to individuals/teams.</li> <li>Mentoring and coaching support ensures that individuals/teams are able to implement the organisation's continuous improvement processes.</li> </ul>
FPPLDR9A.2 Monitor, adjust and report performance.	<ul> <li>The organisation's systems and technology are used to monitor progress and to identify ways in which planning and operations could be improved.</li> <li>Customer service is strengthened through the use of continuous improvement techniques and processes.</li> <li>Plans are adjusted and communicated to those who have a role in their development and implementation.</li> </ul>
FPPLDR9A.3 Consolidate opportunities for further improvement.	<ul> <li>Individuals/teams are informed of savings and productivity improvements in achieving the business plan.</li> <li>Work performance is documented and the information is used to identify opportunities for further improvement.</li> <li>Records, reports and recommendations for improvement are managed within the organisation's systems and processes.</li> </ul>

- · Achieves goals and results
- · Explains the organisation's continuous improvement methods
- Acquires and uses information appropriate to work responsibility
- Provides leadership to colleagues in the implementation of continuous improvement processes
- Monitors/introduces ways to improve performance
- Encourages ideas and feedback to improve processes
- Prepares and negotiates recommendations to improve the continuous improvement processes
- Gains the commitment of individuals/teams to continuous improvement principles and practices
- Uses effective consultative processes
- Promotes available learning methods
- Uses information systems
- Selects and uses available technology appropriate to the task

## Unit FPPLDR10A: Facilitate and Capitalise on Change and Innovation

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR10A.1 Participate in planning the introduction of change.	<ul> <li>Contributes effectively to the organisation's planning processes to introduce change.</li> <li>Plans to introduce change are made in consultation with designated individuals/groups.</li> <li>The organisation's objectives and plans to introduce change are explained clearly to individuals/teams.</li> </ul>
FPPLDR10A.2 Develop creative and flexible approaches and solutions.	<ul> <li>Alternative approaches to managing workplace issues and problems are identified and analysed.</li> <li>Risks are assessed and action is taken to achieve a recognised benefit or advantage to the organisation.</li> <li>The workplace is managed in a way which promotes the development of innovative approaches and outcomes.</li> <li>Creative and responsive approaches to resource management improves productivity and/or reduces costs in a competitive environment.</li> </ul>
FPPLDR10A.3 Manage emerging challenges and opportunities.	<ul> <li>Individuals/teams respond effectively and efficiently to changes in the organisation's goals, plans and priorities.</li> <li>Coaching and mentoring assists individuals/teams develop competencies to handle change efficiently and effectively.</li> <li>Opportunities within responsibility and authority are used to make adjustments to respond to the changing needs of customers and the organisation.</li> <li>Individuals/teams are kept informed of progress in the implementation of change.</li> <li>Recommendations for improving the methods/techniques to manage change are negotiated with designated persons/groups.</li> </ul>

- · Achieves goals and results
- Explains the organisation's methods to introduce change
- Acquires and uses information appropriate to work responsibility
- Identifies opportunities to introduce change within responsibility and authority
- Draws on the diversity of workplace to assist the organisation benefit from change
- Monitors trends in the external environment to develop and maintain a competitive edge
- Monitors/introduces practices to improve performance
- Uses effective consultation processes
- Seeks feedback and acts on constructive advice
- Promotes available learning methods to support colleagues
- Uses information systems
- Selects and uses available technology appropriate to the task

## Unit FPPLDR11A: Contribute to the Development of a Workplace Learning Environment

ELEMENTS	PERFORMANCE CRITERIA
FPPLDR11A.1 Create learning opportunities.	<ul> <li>Workplace environments which facilitate learning are developed and supported.</li> <li>Learning plans are developed as an integral part of individual/team performance plans.</li> <li>Learning plans reflect the diversity of needs and learning opportunities.</li> <li>Individual/team access to, and participation in, learning opportunities is facilitated.</li> <li>Negotiation with training and development specialists results in the planning and provision of learning which enhances individual, team, and organisational performance.</li> </ul>
FPPLDR11A.2 Facilitate and promote learning.	<ul> <li>Workplace activities are used as opportunities for learning.</li> <li>Coaching and mentoring contributes effectively to development of workplace knowledge, skills and attitudes.</li> <li>The benefits of learning are shared with others in the team/organisation.</li> <li>Workplace achievement is recognised by timely and appropriate recognition and feedback.</li> </ul>
FPPLDR11A.3 Monitor and improve learning effectiveness.	<ul> <li>Performance of individuals/teams is monitored to determine the type and extent of additional work-based support.</li> <li>Feedback from individuals/teams is used to identify and introduce improvements in future learning arrangements.</li> <li>Adjustments negotiated with training and development specialists results in improvements to the efficiency and effectiveness of learning.</li> <li>Records and reports of competency are documented and maintained within the organisation's systems and procedures.</li> </ul>

- · Promotes a learning culture
- · Achieves goals and results
- · Explains basic principles of adult learning
- Develops links between work and learning
- Uses coaching and mentoring to assist knowledge/skill formation
- Monitors/introduces ways for people to develop knowledge and skills
- Facilitates opportunities for learning
- Encourages colleagues to share their knowledge and skills
- Creates opportunities for individuals/teams to learn from workplace performance
- Negotiates with training and development specialist individual/team learning needs
- Provides the opportunity for off-the-job learning to be applied in workplace
- Promotes available learning methods to support colleagues
- · Uses information systems
- Selects and uses available technology appropriate to the task

### **WORKPLACE TRAINING**

UNITS	
FPPTRN1A	Prepare for training.
FPPTRN2A	Deliver training.
FPPTRN3A	Review training.
FPPTRN4A	Prepare for training.
FPPTRN5A	Deliver training.
FPPTRN6A	Assess trainees.
FPPTRN7A	Review and promote training.

#### **RANGE STATEMENT**

#### Category 1 (FPPTRN1A - FPPTRN3A) [excludes Units FPPTRN4A-FPPTRN7A]

- Applies to those people who provide training in the workplace but for whom the training function is not a major part of their job. They may provide training infrequently or even regularly within a structured training context.
- Training is provided on a one-to-one basis or to small groups of trainees.

#### Category 2 (FPPTRN4A - FPPTRN7A) [excludes Units FPPTRN1A-FPPTRN3A]

- Applies to those people for whom training is a large part of their job, or the full job function within a structured training context.
- Training provision may range from one-to-one, small group or large group training. It may include both on and off-the-job training provision.

# Unit FPPTRN1A: Prepare for Training

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN1A.1 Confirm the need for training.	<ul> <li>The specific training need is identified or advised by appropriate personnel.</li> <li>The specific training need is confirmed with appropriate personnel.</li> <li>The training objectives reflect the specific training need.</li> </ul>
FPPTRN1A.2 Plan and document training session.	<ul> <li>Training outcomes are clearly stated.</li> <li>Steps in the training session follow a logical sequence.</li> <li>The training method(s) selected are appropriate for:</li> <li>the training outcomes</li> <li>trainee characteristics</li> <li>availability of equipment and resources.</li> <li>Plans for practice by trainees are made.</li> <li>Provision for monitoring trainees' progress is made.</li> <li>Evidence required for assessment and how it will be collected is stated.</li> </ul>
FPPTRN1A.3 Arrange location and resources.	<ul> <li>Resources required for training are identified and approved by appropriate personnel.</li> <li>Suitable locations for the training are arranged.</li> <li>The equipment, tools and other resources required are organised to be available when needed.</li> <li>Arrangements are made with any people who are required to help in the training session or in the follow-up to the training session.</li> <li>The training environment arranged is safe and accessible.</li> </ul>
FPPTRN1A.4 Notify traine es.	<ul> <li>Trainees are notified of the time and place of the training session.</li> <li>Trainees' supervisor(s) are notified of the time and place of the training and of any other requirements for the training session.</li> <li>The purpose of the training is notified to all involved.</li> </ul>

Evidence of satisfactory performance in this Unit is best obtained by observation of the preparation, combined with discussion with the trainer about what has been done.

#### Evidence may include:

- explanation of the specific training need and how it was determined
- the trainer's view of "appropriate personnel"
- an outline of the training session, preferably in writing
- explanation of the training method(s) selected
- recognition of trainee characteristics (eg. language and literacy/numeracy skills, cultural background, previous experience)
- knowledge of possible training locations within the workplace
- knowledge of relevant safety and health standards to be observed
- trainees and their supervisors know about training arrangements made.

## Unit FPPTRN2A: Deliver Training

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN2A.1 Prepare trainees.	<ul> <li>The objectives of the training session are explained to and discussed with the trainees.</li> <li>The sequence of activities to be followed in the training session is explained to trainees.</li> <li>Trainees are made aware of the work application of the skill or job being taught.</li> <li>Any barriers to the performance of the job being taught are identified and discussed with trainees.</li> <li>The assessment process is explained to trainees.</li> </ul>
FPPTRN2A.2 Instruct trainees.	<ul> <li>A systematic approach is taken to instruction, taking into account:</li> <li>explanation</li> <li>demonstration</li> <li>review</li> <li>trainee explanation</li> <li>feedback.</li> <li>Instruction process is revised and modified as necessary to meet the trainees' learning needs.</li> <li>Trainees are encouraged by positive comments from the trainer.</li> <li>Feedback during instruction is designed to help trainees learn from their mistakes.</li> <li>Trainees are encouraged and guided to evaluate their own performance and diagnose it for improvement.</li> </ul>
FPPTRN2A.3 Provide opportunities for practice.	<ul> <li>Practice opportunities are provided according to the specific learning situation and the training objectives.</li> <li>Constructive feedback and reinforcement are provided during practice.</li> <li>Trainees' readiness for assessment is monitored.</li> </ul>
FPPTRN2A.4 Confirm trainee has reached required standard of performance.	<ul> <li>Evidence of satisfactory performance by the trainee is collected in accordance with the training session plan.</li> <li>The trainee is advised that he/she has reached the required standard of performance.</li> <li>Other appropriate personnel are advised that the trainee has reached the required standard of performance.</li> </ul>

#### **EVIDENCE GUIDE**

- Evidence of satisfactory performance is best obtained by observation of training delivery on a number of occasions.
- If this is not possible, then at least one direct observation should be supported by supplementary evidence, such a confirmation by a supervisor or discussions with trainees.

### **Unit FPPTRN3A: Review Training**

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN3A.1 Evaluate training session.	<ul> <li>Trainees are encouraged to raise problems or difficulties with any aspect of the training session.</li> <li>Trainees are asked to discuss their ability to apply the learning outcomes.</li> <li>Trainees' reaction to the training session is sought.</li> <li>Own performance is reviewed against session objectives and in response to trainees' comments.</li> <li>Review comments are summarised.</li> <li>The results of the evaluation are used to guide further training.</li> </ul>
FPPTRN3A.2 Record training.	<ul> <li>The details of the trainees who have completed the training are accurately recorded according to the organisation's requirements.</li> <li>Other records as required by legislation or agreement are kept.</li> <li>Records are released to authorised personnel only.</li> <li>Records are securely stored.</li> </ul>
FPPTRN3A.3 Provide information on training.	<ul> <li>Information on training proposed, in hand or completed is provided to management as required.</li> <li>Information on proposed training is provided to prospective trainees on request.</li> <li>Information on appropriate, available training is provided to employees on request.</li> </ul>

#### **EVIDENCE GUIDE**

Evidence of satisfactory performance in this Unit should best be a combination of observation of the trainer's review with the trainees, an inspection of records and discussion with the trainer about his or her appreciation of the session. Where direct observation is not possible, discussion with the trainees might be a substitute.

Furthermore, evidence may include:

 knowledge of the organisation's record keeping arrangement and security and access procedures.

## **Unit FPPTRN4A: Prepare for Training**

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN4A.1 Confirm the need for training.	<ul> <li>Information on training needs is collected using appropriate investigation methods.</li> <li>Appropriate methods of analysis are used to interpret the information.</li> <li>Conclusions about the need for training are verified with appropriate personnel.</li> </ul>
FPPTRN4A.2 Define training requirements.	<ul> <li>Competencies that relate to specific jobs, roles or functions are identified.</li> <li>Applicable endorsed competency standards are obtained and used.</li> <li>Competencies held by individuals are correctly compared with competencies required for the job, role or function.</li> <li>Training outcomes are identified in consultation with relevant parties.</li> <li>Barriers to learning are identified.</li> </ul>
FPPTRN4A.3 Develop training programs.	<ul> <li>The learning outcomes clearly specify performance requirements and underpinning knowledge requirements.</li> <li>Sequence and timing of the learning outcomes are recorded.</li> <li>Strategies are adopted to make training accessible and effective for all trainees.</li> <li>Strategies to overcome barriers to learning are developed.</li> <li>Training methods are identified which are appropriate for: <ul> <li>the training outcomes</li> <li>trainee characteristics</li> <li>availability of equipment and resources.</li> </ul> </li> <li>Training is designed and developed so that, at appropriate stages, learning will be confirmed and feedback provided to trainees.</li> <li>Opportunity is provided for trainees to relate learning to their work situation.</li> <li>Trainees are given the opportunity to manage their own learning.</li> <li>Learning materials are identified.</li> <li>Evidence required for assessment and how it will be collected is stated.</li> <li>Training costs are identified and confirmed with appropriate personnel.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN4A.4 Prepare learning materials.	<ul> <li>Learning outcomes are listed.</li> <li>Design decisions are taken to overcome barriers to learning.</li> <li>Subject matter required to achieve the learning outcomes is specified.</li> <li>Formats for the material are selected which enhance the learning capability of trainees.</li> <li>Text appropriate in terms of language, style and level, is used.</li> <li>Clear, accurate visual materials conforming to display conventions are used.</li> <li>Instructions for use of required equipment are provided.</li> <li>Copyright laws are observed.</li> </ul>
FPPTRN4A.5 Manage training events.	<ul> <li>Resources required for training are identified, and approved by appropriate personnel.</li> <li>A training location is identified and arranged to support the learning opportunities specified.</li> <li>The required equipment, tools and other resources are identified and arranged to support the learning opportunities specified.</li> <li>Arrangements are made with any people who are required to help in the training program.</li> <li>The training environment arranged is safe and accessible.</li> </ul>
FPPTRN4A.6 Establish training data bank.	<ul> <li>A list of internal training resource people is maintained.</li> <li>External people from whom information on training can be obtained are identified and their names recorded in an accessible form.</li> <li>Training materials and information on training and assessment are held in an accessible form.</li> <li>An up-to-date register of likely external courses and providers is maintained.</li> </ul>

Evidence of satisfactory performance in this unit is best gathered from a review of the documented training program and materials and discussion with the trainer.

- knowledge of investigation methods
- · acceptable rationale for choice of investigation methods
- · necessary range of investigations
- justification for choice of methods to determine competencies if endorsed competency standards are not available
- recognition of barriers to learning among trainees such as language, literacy and numeracy skills, or barriers arising from cultural background, physical impairment or previous experience of the trainees
- knowledge of a variety of presentation/training methods
- · explanation of training methods selected
- recognition of barriers to learning (see above)
- criteria employed for selecting media, text and visual materials
- basic knowledge of display conventions
- knowledge of the import of copyright laws
- · record of venues
- knowledge of relevant safety and health standards to be observed
- indexed, annotated records of internal and external training resources.

## **Unit FPPTRN5A: Deliver Training**

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN5A.1 Prepare trainees for the learning experience.	<ul> <li>Training objectives and learning outcomes are explained to, and discussed with, trainees.</li> <li>Any barriers to learning are explored with trainees.</li> <li>The sequence of activities to be followed in the training program is explained to trainees.</li> <li>Ways in which the competencies are to be developed and assessed are explained to, and discussed with, trainees.</li> </ul>
FPPTRN5A.2 Present training session.	<ul> <li>Presentation and training methods are structured and appropriate for the development of the competencies by the trainees.</li> <li>Presentation and training methods provide variety, encourage participation and reinforce key points.</li> <li>Presentation process is reviewed and modified as necessary to meet trainees' learning needs.</li> <li>Training equipment and materials are used in a way that improves the trainees' learning.</li> <li>Information is clear and accurate and presented in correct sequence.</li> <li>Trainees are encouraged to participate by asking questions, clarifying points of concern and contributing comments at appropriate and identified stages.</li> <li>Supplementary information is provided to enhance and clarify understanding as required.</li> <li>Summaries of key points are used at appropriate times in the presentation session to reinforce learning.</li> </ul>
FPPTRN5A.3 Support trainees in managing their own learning.	<ul> <li>Resource materials suitable for self-managed learning are provided.</li> <li>Trainees are briefed in their role.</li> <li>Health and safety hazards are pointed out to trainees.</li> <li>Timely information and advice is given to trainees during the learning process.</li> <li>Assistance is provided to those who require help.</li> <li>Opportunities to make choices and decisions are provided.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN5A.4 Facilitate group learning.	<ul> <li>Trainees are briefed on the rationale, process and outcomes of a group approach.</li> <li>Group training methods are used to maximise learning effectiveness.</li> <li>Individuals are assigned to groups in which they can work effectively.</li> <li>Groups are provided with clear directions, and guidance on content and process as required.</li> <li>Groups are assisted to recognise the needs and requirements of individual members.</li> <li>Interventions by the trainer in group discussions are properly managed.</li> <li>Review of group processes is shared between the participants and the trainer.</li> </ul>
FPPTRN5A.5 Provide opportunities for practice.	<ul> <li>Practice opportunities are provided according to the specific learning situation and the training program.</li> <li>Trainees' readiness for assessment as having achieved competency is monitored and discussed with trainees.</li> <li>Process, rationale and outcomes of practice are discussed with trainees.</li> <li>Constructive feedback and reinforcement are provided during practice.</li> </ul>
FPPTRN5A.6 Provide feedback on progress to trainees.	<ul> <li>Trainees' progress is evaluated against learning outcomes, organisation and trainee goals.</li> <li>Feedback is given to trainees on the outcomes of progress review.</li> <li>Trainees are helped to consider their progress.</li> <li>Progress results are diagnosed to provide a guide for the approach to next steps in training.</li> </ul>
FPPTRN5A.7 Review delivery experience.	<ul> <li>Trainees' reaction to the delivery is sought and discussed at appropriate times.</li> <li>Trainer's performance is self-assessed against predetermined goals.</li> <li>Adjustments to delivery practices are considered and incorporated.</li> </ul>

Evidence of satisfactory performance in this unit is best gathered from observation of training delivery in a number of settings, with different training programs. Discussion with the trainer will be necessary.

- ways of addressing any barriers to learning among trainees such as language, literacy and numeracy levels, or barriers arising from the cultural background, physical impairment or previous experience of the trainees
- explanation of the criteria for selection of resource materials
- · understanding of group processes and dynamics
- evidence of changes made to subsequent delivery practices based on feedback from trainees.

### **Unit FPPTRN6A: Assess Trainees**

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN6A.1 Establish evidence required.	<ul> <li>Evidence sought is consistent with endorsed competency standards, where they apply, or else learning outcomes identified in the training program.</li> <li>Amount and type of evidence specified is sufficient to enable a valid assessment decision to be made.</li> <li>Assessment methods are selected which are appropriate for the skills and knowledge to be assessed.</li> </ul>
FPPTRN6A.2 Organise assessment.	<ul> <li>Assessment arrangements, evidence requirements and appeal mechanisms (if applicable) are discussed and confirmed with trainees.</li> <li>Resources are organised consistent with assessment requirements.</li> <li>Relevant people are informed of planned assessment according to the organisation's policy.</li> <li>The assessment environment is prepared to facilitate a fair, valid and reliable assessment.</li> <li>The assessment environment is safe and accessible.</li> </ul>
FPPTRN6A.3 Gather evidence.	<ul> <li>Evidence gathered is consistent with endorsed competency standards or learning outcomes specified in the training program.</li> <li>Evidence gathered is valid and reliable.</li> <li>Evidence gathered is documented according to the organisation's requirements.</li> </ul>
FPPTRN6A.4 Make the assessment decision.	Assessment decision is based on evidence gathered.     Evidence is weighed in terms of:         - validity         - authenticity         - sufficiency         - currency         - consistent achievement of specified standard.         Assessment decision is made in accordance with performance criteria specified in competency standards or learning outcomes in the training program.
FPPTRN6A.5 Provide feedback during and after assessment.	<ul> <li>Action is taken to put trainees at ease, as appropriate for the assessment procedure being used.</li> <li>Progress is discussed with trainees, as appropriate for the assessment procedures being used.</li> <li>Performance is discussed and confirmed with trainees.</li> <li>Results are provided to trainees.</li> <li>Clear and constructive feedback on results is given to trainees.</li> <li>Trainees are encouraged to explore the available ways of overcoming any gaps in their competence revealed by the assessments.</li> <li>Trainees are given guidance on further training goals/training opportunities.</li> </ul>

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN6A.6 Record assessment results.	<ul> <li>Assessment results are recorded promptly in accordance with organisational procedures and/or legislative requirements.</li> <li>Assessment records are stored securely.</li> <li>Access to assessment records is restricted to authorised person(s) in accordance with the organisation's procedures.</li> </ul>
FPPTRN6A.7 Review assessment procedure.	<ul> <li>Assessment procedure is reviewed in co-operation with trainees and relevant person(s) in the organisation.</li> <li>Changes are made in the training program's assessment procedures in the light of review outcomes.</li> </ul>

Evidence of satisfactory performance in this Unit is best obtained by observation of assessment conducted by the trainer, combined with discussion with the trainer about the assessment process.

- knowledge of range of assessment methods
- · explanation of assessment methods chosen
- understanding of assessment principles included in the NFROT Agreement
- knowledge of relevant health and safety standards to be observed
- knowledge of relevant legislative requirements for record keeping.

# **Unit FPPTRN7A: Review and Promote Training**

ELEMENTS	PERFORMANCE CRITERIA
FPPTRN7A.1 Evaluate training.	<ul> <li>Training is evaluated against identified needs and outcomes.</li> <li>Trainees are encouraged to raise problems or difficulties with any aspect of the training session.</li> <li>Trainees' reaction to training session is sought.</li> <li>Trainees are encouraged to evaluate their progress towards achieving competency in the skill or job.</li> <li>Own performance is reviewed against session objectives and in response to trainees' comments.</li> <li>Provision of training within approved budget is reviewed.</li> <li>The results of the evaluation are used to guide further training.</li> </ul>
FPPTRN7A.2 Record training data.	<ul> <li>Details of training program and participants are recorded in accordance with organisation/industry and/or legislative requirements.</li> <li>An appropriate means of storing information on trainees, training programs, and equipment, materials and resources is established and maintained.</li> <li>Existing recording systems are reviewed and improvements suggested.</li> <li>Training records are made available to authorised persons and trainees at the required times according to organisational requirements.</li> <li>Records are securely stored.</li> </ul>
FPPTRN7A.3 Report on training.	<ul> <li>Reports on training in the organisation are prepared and provided according to organisational requirements.</li> <li>Reports are made on future training initiatives.</li> <li>Information on achievements of the organisation's training is analysed and publicised.</li> <li>The contribution of training to organisational goals is reported.</li> </ul>
FPPTRN7A.4 Promote training.	<ul> <li>Advice on the development of training plans is provided to appropriate committees, or personnel.</li> <li>Information on planned training events is made widely available.</li> <li>Benefits of training to individuals and the organisation are publicised.</li> <li>Promotional activities are regularly monitored for effectiveness.</li> <li>Information is distributed concerning the relationship between training reform and the organisation.</li> </ul>

Evidence of satisfactory performance in this Unit is best gathered by a review of the documentation completed in reviewing and recording the training and its outcomes and promotional material developed by the trainer. Discussion with the trainer will be necessary.

- · evaluation reports
- knowledge of the organisation's record keeping and retrieval systems, security and access procedures
- awareness of legislative and privacy requirements
- indexed, annotated records of internal and external training resources.