



Australian Government

Department of Education, Employment and Workplace Relations

FPPWPO440A Troubleshoot and rectify waste paper operations

Release: 1

FPPWPO440A Troubleshoot and rectify waste paper operations

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to troubleshoot and rectify waste paper operations in the pulp and paper industry

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

Application of the Unit

Application of the unit

This unit applies to operators who troubleshoot and rectify waste paper operations in the pulp and paper industry. This work typically involves complex integrated equipment and continuous operations

This unit generally applies to those who:

- identify and analyse causes of faults
- rectify plant faults
- rectify product quality faults, and
- record and report system performance and product quality data

to meet safety, quality and productivity requirements

It does not include starting up, shutting down or monitoring and controlling waste paper operations

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
|--|---|
| 1. Identify and analyse causes of faults | 1.1. Causes of faults are identified and analysed within Occupational Health and Safety (OHS) regulations, environmental and safe working requirements/practices, Standard Operating Procedures (SOP), and housekeeping requirements 1.2. Alarms are interpreted to determine fault type and location 1.3. Sampling and testing results are interpreted to identify variations from specifications or schedule 1.4. Causes and sources of fault are identified and located 1.5. Relevant sources of information are accessed and interpreted to assist analysis |
| 2. Rectify plant faults | 2.1. Plant faults are rectified within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements 2.2. Operator level on-line adjustments are conducted as required 2.3. Plant is shut down and isolation procedures are implemented prior to fault rectification 2.4. Faulty plant is isolated, by-passed, repaired or replaced as required 2.5. Plant is returned to normal operation 2.6. Verification is communicated to relevant personnel |
| 3. Rectify product quality faults | 3.1. Product quality faults are rectified within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements 3.2. Quality faults or variations are identified by observation, systematic sampling and testing 3.3. Test results are interpreted and operations are adjusted to correct faults 3.4. Faults and causes are rectified if appropriate or recommendations made for further action 3.5. Out-of-specification product is managed |
| 4. Record and report system performance and product quality data | 4.1. System performance and product quality data is recorded and reported within OHS regulations, environmental and safe working requirements/practices, SOP, and housekeeping requirements |

ELEMENT**PERFORMANCE CRITERIA**

- 4.2. Process variations and faults are recorded
- 4.3. Stock production and machine operation faults are recorded
- 4.4. Actions undertaken to troubleshoot and rectify faults are recorded
- 4.5. Relevant information is communicated to appropriate personnel

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the skills and knowledge required for this unit.

Required skills

- Identifies, accesses and interprets relevant historical and operational data and information
- Uses required forms of communication in troubleshooting and rectifying waste paper operations
- Reads and interprets required documentation, procedures and reports
- Accesses, navigates and enters computer-based information
- Interprets instruments, gauges and data recording equipment
- Communicates effectively with personnel to assist with analysis and resolution of operational problems
- Assists others to identify and resolve operational problems in the workplace
- Identifies and actions systems, quality and equipment faults within level of responsibility
- Identifies causes and effects of faults and corrective action on associated processes
- Selects and uses appropriate troubleshooting methods
- Takes timely corrective action to maximise safety, quality and productivity
- Undertakes necessary calculations to aid troubleshooting as required
- Uses troubleshooting guides and diagnostic procedures
- Demonstrates that stock quality is consistently within specification
- Maintains situational awareness in the work area
- Takes samples, conducts tests, interprets and records results if required
- Operates high risk (and non-high risk) load shifting equipment, as required
- Analyses and uses sensory information to adjust process to maximise safety, quality and productivity
- Uses electronic and other control systems to control equipment and processes as required

REQUIRED SKILLS AND KNOWLEDGE

Required knowledge

- Procedures, regulations and legislative requirements relevant to waste paper operation including OHS, environmental including relevant sustainability requirements/practices, SOP, isolation procedures, safe working requirements, risks and hazard identification and housekeeping
- Relevant forms of communication
- Detailed knowledge of waste paper system, processes and associated services sufficient to troubleshoot including:
 - plant layout
 - theory of operation
 - causes and effects of adjustments made to waste paper plant and processes
 - relationships between waste paper plant system, processes and associated services
- An appropriate range of troubleshooting methods
- Sampling and testing process for plant and system operations, and process monitoring - purpose, standards and procedures as per site agreements
- Purpose and operation of reject systems
- Purpose and operation of water systems
- Purpose and effects of process variables on production and quality
- Plant operation and control mechanisms
- Application of high risk (and non-high risk) load shifting equipment as required
- Sensory information that indicates a deviation from standard operating parameters
- Sufficient knowledge of electronic and other control systems, operation and application to make appropriate adjustments that control waste paper operation, within level of responsibility

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

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

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

- the required knowledge and skills tailored to the needs of the specific workplace
- applicable OHS regulations, environmental and safe working requirements/practices, SOP and housekeeping requirements
- applicable aspects of the range statement
- practical workplace demonstration of skills in troubleshooting and rectifying waste paper operations

Context of and specific resources for assessment

A workplace assessment must be used to assess:

- the application of required knowledge on the job
- the application of skills on the job, over time and under a range of typical conditions that may be experienced in waste paper operations

Access to the full range of equipment involved in integrated continuous manufacturing of waste paper operations in a pulp or paper mill is required

Method of assessment

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

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

Assessment processes and techniques must be culturally appropriate and in keeping with the language

EVIDENCE GUIDE

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

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

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

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Productivity requirements may include:

- energy efficiency
- waste minimisation
- evaporation minimisation, including landfill and waste water reduction
- environmentally safe waste disposal
- consideration of resource utilisation, including fibre efficiency
- minimising delays
- chemical recovery maximisation
- meeting key performance indicators
- line speed
- handovers
- quality checks
- meeting output targets i.e. net tonnes per employee per annum
- machine/process time availability i.e. time the machine or process is making product

RANGE STATEMENT

- Waste paper operations may include:
- machine/process production rate
 - pulping
 - screening
 - de-watering
 - reject systems
- System shutdowns may be caused by:
- product change
 - mechanical failures
 - crash shut
 - full storage or low supply storage
 - maintenance shut
 - process failures
- Materials and supplies may include:
- waste paper
 - air
 - chemicals
 - broke
 - steam
 - water
 - electricity
- Equipment may include:
- broke handling systems
 - fork trucks and front end loaders
 - cranes
 - communication equipment and 2-way radios
 - computer systems
 - electronic screens and alarms
 - process control systems
 - analogue and digital instruments
 - fully automated, semi-automated, manually operated plant and equipment appropriate to waste paper operations
- Electronic control systems may include:
- Digital Control System (DCS)
 - touch screens
 - robotics
- Legislation, regulatory, licensing and certification requirements may include:
- OHS and environmental requirements (local, state and commonwealth)
 - activity or task specific high risk (and non-high risk) load shifting licensing requirements
- Documentation, procedures and reports may include:
- SOP
 - quality procedures
 - environmental sustainability requirements/practices

RANGE STATEMENT

- plant manufacturing operating manuals
 - oil or chemical spills and disposal guidelines
 - plant isolation documentation
 - safe work documentation e.g. plant clearance, job safety analysis, permit systems
 - Material Safety Data Sheets (MSDS)
 - furnish sheets
 - tally sheets
 - process and instrument diagrams
- Maintenance may include:
- operator level maintenance as per site agreement
 - operator maintenance schedules
 - maintenance systems
 - maintenance suppliers
 - proactive maintenance strategies e.g. Total Productive Maintenance (TPM), Reliability Centred Maintenance (RCM)
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- Actions may include:
- process adjustments
 - reporting to authorised person
 - rectifying problem within level of responsibility
- Communications may include interaction with:
- internal/external customers and suppliers
 - team members
 - maintenance services
 - operational management
- Situational awareness may include awareness of:
- traffic
 - pedestrians
 - location of equipment
 - product
 - hazards
 - obstruction
 - unexpected movement
- Forms of communications may
- written e.g. log books, emails, incident and

RANGE STATEMENT

include:

other reports, run sheets, data entry

- reading and interpreting documentation e.g. SOP, manuals, checklists, drawings
- verbal e.g. radio skills, telephone, face to face, handover
- non-verbal e.g. hand signals, alarms, observations
- signage e.g. safety, access

Sensory information may include:

- visual
- sound
- feel
- touch
- smell
- vibration
- temperature

Unit Sector(s)

Not Applicable