



Australian Government

PPMSPR440 Troubleshoot and rectify stock preparation systems

Release: 2

PPMSPR440 Troubleshoot and rectify stock preparation systems

Modification History

Release	Comments
Release 2	This version released with PPM Pulp and Paper Manufacturing Training Package Version 2.0.
Release 1	This version released with PPM Pulp and Paper Manufacturing Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to identify and analyse causes of system, equipment and product faults and to rectify and report on problems in the stock preparation area of a pulp or paper manufacturing facility.

The unit applies to senior operators and production specialists who troubleshoot and rectify stock preparation systems. This typically involves working in a facility with complex integrated equipment and continuous operations.

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

Pre-requisite Unit

Nil

Unit Sector

Stock preparations operations (SPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify and analyse causes of system faults	1.1 Complete routine visual or physical walk to identify system faults in line with workplace health and safety and standard operating procedures (SOP) 1.2 Interpret alarm system alerts and observations to diagnose fault

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	type 1.3 Access plant operating logs to assist diagnosis 1.4 Sample and test stock for variations from quality specifications; interpret and record results 1.5 Analyse all information collected to identify fault type and location 1.6 Report fault and communicate proposed actions to rectify 1.7. Select, fit, use and maintain personal protective equipment according to job requirements and task to be undertaken
2. Rectify system and equipment faults	2.1 Follow organisational safety and SOP to shut down and isolate equipment prior to fault rectification 2.2 By-pass faulty equipment where the process allows 2.3 Repair or replace faulty equipment and make corrective system adjustments 2.4 Complete routine preventative maintenance according to organisational procedures 2.5 Restore system operations and advise relevant personnel of return to normal operation
3. Rectify product quality faults	3.1 Identify variations in specified quality of stock, chemicals and water through routine visual observations 3.2 Sample and test stock for variations from quality specifications; interpret and record results 3.3 Adjust processes to rectify out-of-specification product
4. Record and report faults and rectification process	4.1 Document system and product faults according to organisational procedures 4.2 Record and report diagnostic and corrective action processes to relevant personnel

Foundation Skills

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

Skill	Description
Reading	- Interpret workplace health and safety and SOP - Interpret equipment operating logs
Writing	Complete accurate detailed records for system and product faults, diagnostic and corrective action processes
Numeracy	- Interpret basic numerical settings on instruments, gauges and data recording equipment - Assess and interpret system and product data - Record detailed numerical data for system and product test results
Interact with others	- Provide clear comprehensive information about problems with equipment and products - Provide clear unambiguous information about return to normal operations to system operators and other personnel
Get the work done	Use and assess sensory information (sight, sound, touch, smell, vibration, temperature) to respond to system and product faults

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
PPMSPR440 Troubleshoot and rectify stock preparation systems Release 2	PPMSPR440 Troubleshoot and rectify stock preparation systems Release 1	Performance criteria added, minor changes to knowledge evidence	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-d0ac-40bc-a69e-72a600d4fd93>

Assessment Requirements for PPMSPR440 Troubleshoot and rectify stock preparation systems

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has:

- identified and rectified faults in plant, equipment and product quality and system performance, at least twice in line with required enterprise intervals, relevant to stock preparation systems
- selected and used appropriate trouble shooting methods in stock preparation systems
- used electronic and other control systems, including portable control devices, touch screens or robotics to control equipment and processes during troubleshooting
- communicated effectively and working safely with others, in the work area when rectifying stock preparation systems
- identified, analysed causes and rectified system and equipment faults for stock preparation system types including:
 - refining system
 - blending system
 - proportioning system
 - broke system
 - cleaning system
 - water recovery system
 - chemical and additive plants
- sampled and tested stock for variations from quality specifications
- completed accurate detailed records for system and product faults, diagnostic and corrective action processes on completion of fault rectification jobs.

Knowledge Evidence

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

- organisational procedures relevant to workplace health and safety with particular emphasis on:
 - use of personal protective equipment (PPE)
 - equipment lock out and isolation procedures
 - handling chemicals and hazardous substances, including spill and disposal guidelines
 - plant clearance requirements
 - emergency procedures and responses
 - job safety analysis documentation and processes
 - plant permit systems and processes
 - high risk load shifting licensing requirements where relevant
 - major hazard facility requirements where relevant
- system layout for stock preparation systems
- purpose, features and operation of stock preparation system plant, operating parameters and allowable variations
- operation and application of electronic and other control systems
- relationships between all components of stock preparation plant, processes and associated services
- troubleshooting methods that can be applied across system and problem faults in stock preparation systems including:
 - equipment faults
 - deviations from operational specifications for equipment
 - deviations from quality specifications for stock
- stock preparation processes and equipment required to:
 - shut down equipment
 - restore system operation
- purpose of, and processes for sampling and testing stock quality, plant and system operations
- quality requirements for different types of stock
- effect of process adjustments on stock quality and productivity
- organisational procedures:
 - standard operating procedures specific to inspecting and rectifying faulty stock preparation equipment and product
 - communication reporting lines
 - recording and reporting system and product faults, diagnostic and corrective action processes.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or a productive environment that accurately reflects performance in a workplace
- resources, equipment and materials:
 - access to the full range of equipment involved in integrated continuous manufacturing of stock preparation systems in a pulp or paper manufacturing facility
 - testing equipment for stock
 - maintenance tools and equipment and consumables for stock preparation equipment
 - PPE suitable for inspecting and rectifying faulty stock preparation equipment and product
- specifications:
 - organisational workplace health and safety and standards for stock preparation systems in a pulp or paper mill
 - template documents for recording system and product faults, diagnostic and corrective action processes operating procedures for inspecting and rectifying faulty stock preparation equipment and product.

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

Links

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