

**Modification history**

Release	Comments
Release 1	This version released with PPM Pulp and Paper Manufacturing Training Package Version 3.0.

PPMSPR4XX	Troubleshoot and rectify stock preparation systems
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to identify diagnose, rectify and report on system, equipment and quality faults in the stock preparation systems of a pulp and paper manufacturing facility.</p> <p>The unit applies to senior operators and production specialists who work in the pulp and paper manufacturing industry and troubleshoot and rectify complex system faults that occur in continuous stock preparation operations.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Stock preparations operations (SPR)

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 and quality faults	1.1 Prepare for rectification of stock preparation systems according to productivity requirements and work health and safety and environmental procedures 1.2 Identify safety hazards and identify risk control measures with relevant personnel 1.3 Interpret alarm system alerts and complete routine visual checks to identify system faults 1.4 Access plant operating logs and check for recent work undertaken on plant to assist diagnosis 1.5 Conduct systemic sampling and testing and interpret results and interpret results to identify variations from quality specifications 1.6 Analyse collected information to identify fault type and location 1.7 Report fault and proposed corrective actions to relevant personnel
2. Rectify system and equipment faults	2.1 Shut down and isolate equipment according to work health and safety and operating procedures 2.2 By-pass faulty equipment as process allows 2.3 Repair or replace faulty equipment and make corrective system adjustments according to manufacturer specifications 2.4 Complete routine preventative maintenance according to workplace procedures 2.5 Restore system operations and communicate verification to relevant personnel
3. Rectify product quality faults	3.1 Conduct further testing to identify variations in specified quality of stock, chemicals and water 3.2 Adjust processes to rectify out-of-specification product according to operating procedures
4. Record and report troubleshooting and rectification activities	4.1 Document system and product faults according to workplace requirements 4.2 Record and report diagnostic and corrective action processes to relevant personnel

<b>Foundation Skills</b>	
<i>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.</i>	
<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Interpret information from a range of documentation</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Complete accurate detailed records and reports for system and product faults, diagnostic and corrective action processes using the required format</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Provide comprehensive information about problems with equipment and products using clear language and industry terminology</li> <li>Provide clear unambiguous information about return to normal operations to system operators and other personnel</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Interpret basic numerical settings on instruments, gauges and data recording equipment</li> <li>Assess and interpret system and product data</li> <li>Record detailed numerical data for system and product test results</li> <li>Use measuring equipment to measure and undertake calculations</li> </ul>

<b>Unit Mapping Information</b>			
<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
PPMSPR4XX Troubleshoot and rectify stock preparation systems	PPMSPR440 Troubleshoot and rectify stock preparation systems Release 1	Changes to elements, performance criteria, foundation skills, performance and knowledge evidence. Assessment conditions updated.	Equivalent

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

<b>TITLE</b>	<b>Assessment requirements for PPMSPR4XX Troubleshoot and rectify stock preparation systems</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has carried out troubleshooting and rectification activities for at least one of the following stock preparation system types, on at least two occasions according to operational requirements:</p> <ul style="list-style-type: none"> <li>• refining system</li> <li>• blending system</li> <li>• proportioning system</li> <li>• broke system</li> <li>• cleaning system</li> <li>• water recovery system</li> <li>• chemical and additive plants.</li> </ul> <p>In doing the above, the individual must have, for each occasion:</p> <ul style="list-style-type: none"> <li>• selected and used appropriate troubleshooting and testing methods to identify system and product quality faults</li> <li>• diagnosed causes and sources of faults on system and associated processes</li> <li>• identified and taken timely corrective action to rectify and maximise safety, quality and productivity</li> <li>• communicated effectively and worked safely with others when undertaking troubleshooting and rectification activities</li> <li>• completed accurate detailed records for system and product faults, diagnostic and corrective action processes on completion of fault rectification activity.</li> </ul>	
<b>Knowledge Evidence</b>	
<p>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:</p> <ul style="list-style-type: none"> <li>• workplace and legislative health and safety requirements and risk measures relevant to operating, troubleshooting and rectifying stock preparation operations, including emergency procedures, handling chemical and hazardous substances, high risk load shifting, licensing requirements, plant clearance and permit systems</li> <li>• relevant workplace and legislative environmental sustainability requirements and practices for stock preparation operations, including workplace biotechnological applications and processes considerations for troubleshooting and rectification activities</li> <li>• system layout for stock preparation systems</li> <li>• purpose, features and operation of stock preparation system plant, operating parameters and allowable variations</li> <li>• operation and application of electronic and other control systems</li> <li>• relationships between components of stock preparation plant, processes and associated services</li> <li>• troubleshooting methods that can be applied across system and problem faults in stock preparation systems</li> <li>• stock preparation processes and equipment required to isolate and shut down equipment and restore system operation</li> <li>• manufacturer specifications and operating procedures for stock preparation systems, including shut and isolation procedures</li> <li>• purpose of, and processes for sampling and testing stock quality, plant and system operations</li> <li>• quality requirements for different types of stock</li> <li>• effect of process adjustments on stock quality and productivity.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of the skills in this unit of competency must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions:</li> </ul>	

<b>Assessment Conditions</b>	
<ul style="list-style-type: none"> <li>• skills must be demonstrated in a pulp or paper manufacturing facility or an environment that accurately represents workplace conditions</li> <li>• resources, equipment and materials:                             <ul style="list-style-type: none"> <li>• tools, equipment and consumables used to troubleshoot and rectify stock preparations systems</li> <li>• personal protective equipment required for inspecting and rectifying faulty stock preparation equipment and product</li> <li>• proforma or recording system for recording diagnostic and corrective action processes</li> </ul> </li> <li>• specifications:                             <ul style="list-style-type: none"> <li>• workplace and standard operating procedures relating to troubleshooting and rectifying stock preparation systems including health and safety, environmental, risks and hazards identification, plant isolation and quality and requirements</li> <li>• manufacturer specifications and operating procedures</li> </ul> </li> <li>• relationships:                             <ul style="list-style-type: none"> <li>• relevant personnel for the purposes of communicating information.</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	

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