

**Modification history**

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

PPMWEO2XX	Monitor and control wet end operations
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to monitor and control wet end operations, ensure product quality, complete product grade changes and record process and system information.</p> <p>The unit applies to production support workers who, under supervision, assist in the wet end area work of a pulp and paper manufacturing facility, undertaking routine work in monitoring, identifying and solving predictable problems that occur with integrated equipment and continuous 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>	Wet end operations (WEO)

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. Prepare to monitor wet end operations	1.1 Check production requirements at start of shift and plan work activities according to work health and safety and standard operating procedures 1.2 Identify health and safety hazards and report safety concerns 1.3 Select and fit personal protective equipment according to safety requirements 1.4 Check tools and equipment are operational, and supplies are available
2. Monitor and maintain process	2.1 Confirm operational status by inspection, observation and other information 2.2 Maintain process supplies to meet production requirements 2.3 Monitor process to ensure wet end system operations are within specification 2.4 Identify, rectify or report routine variations from specification 2.5 Monitor and maintain process levels to maintain productivity requirements 2.6 Detect sheet breaks and re-establish sheet according operating procedures 2.7 Complete routine preventative maintenance according to maintenance schedules
3. Control product quality	3.1 Monitor and maintain sheet according to quality requirements 3.2 Conduct routine visual observations and assessments on product and system operations 3.3 Sample and test product quality and interpret and record results 3.4 Adjust system operation to rectify out-of-specification product and maintain productivity requirements

<b>Elements</b>	<b>Performance Criteria</b>
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
4. Complete product grade change	4.1 Identify grade change requirements and obtain required stock and chemicals 4.2 Shut down wet end systems according to operating procedures 4.3 Complete flushing, draining and cleaning of stock, chemicals and water systems according to operating procedures 4.4 Implement process setups or adjustments to meet new grade requirements 4.5 Prepare required raw materials and supplies for new grade requirements 4.6 Implement stock, chemical and water system start-ups to meet new grade requirements 4.7 Implement grade change on the run according to production specifications
5. Record and report product and process data	5.1 Interpret production data and enter into recording system 5.2 Communicate problems or variations with process, product or equipment to relevant personnel

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<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 in workplace procedures and maintenance schedules</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Complete accurate basic records in the required format</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Provide clear basic information about problems or variations with process, products and equipment using clear language and industry terminology</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Interpret basic numerical settings on instruments, gauges and data recording equipment</li> <li>Record basic numerical data for test results and production outcomes</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>
PPMWEO2XX Monitor and control wet end operations	PPMWEO210 Monitor and control wet end operations	Element added. Changes to 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 PPMWEO2XX Monitor and control wet end operations</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 monitored and controlled wet end operations for at least two operational intervals, including for each interval:</p> <ul style="list-style-type: none"> <li>• completed checks throughout the process and responded appropriately to variations from process and product specifications</li> <li>• completed routine maintenance on equipment</li> <li>• completed a product grade changes</li> <li>• completed records for system operation, production outcomes and equipment faults.</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 procedures relevant to work health and safety for wet end operations: <ul style="list-style-type: none"> <li>• use of personal protective equipment</li> <li>• equipment lock out and isolation procedures</li> <li>• handling chemicals and hazardous substances, including spill and disposal guidelines</li> <li>• plant clearance requirements</li> <li>• emergency procedures and responses</li> <li>• job safety analysis documentation and processes</li> </ul> </li> <li>• permits and licensing requirements for facility hazards and high risk plant and equipment relevant to wet end operations</li> <li>• workplace environmental sustainability requirements and practices for wet end operations, including workplace biotechnological applications and processes and biomass-derived products</li> <li>• system layout for wet end plant</li> <li>• purpose, features and operation of wet end system plant, operating parameters and allowable variations</li> <li>• operation and application of electronic and other control systems to control wet end operations</li> <li>• key features of processes involved coordinating grade changes</li> <li>• purpose of, and processes for sampling and testing product quality, plant and system operations</li> <li>• quality requirements for different types of wet end product</li> <li>• methods used to monitor wet end system operations against specified system parameters</li> <li>• effect of process adjustments on product quality and productivity during monitoring and operation</li> <li>• types of grades for wet end product and applicable terminology</li> <li>• types of raw materials used to produce wet end product and how they influence paper properties</li> <li>• procedures for communicating, recording and reporting system operation, production outcomes and equipment faults.</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: <ul style="list-style-type: none"> <li>• skills must be demonstrated in a pulp or paper manufacturing facility or an environment that accurately reflects performance in a workplace</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• wet end plant and equipment</li> <li>• maintenance tools and equipment and consumables for wet end plant and equipment</li> <li>• personal protective equipment required for monitoring and controlling wet end operations</li> <li>• test and diagnostic equipment</li> <li>• electronic control systems which include digital control system, touch screens or robotics</li> <li>• proforma or recording system for recording system operation and production outcomes</li> </ul> </li> <li>• specifications:</li> </ul>	

<b>Assessment Conditions</b>
<ul style="list-style-type: none"><li>workplace and standard operating procedures relating to wet end operations including health and safety, risks and hazards identification, plant isolation, quality, housekeeping and environmental requirements</li><li>maintenance schedules for stock preparation systems.</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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