

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.

PPMPUL440	Troubleshoot and rectify pulping processes
Application	<p>This unit of competency describes the skills and knowledge required to troubleshoot, rectify and report on pulping processes in the pulp and paper industry.</p> <p>The unit applies to operators, technicians and senior technicians who troubleshoot and rectify pulping processes, in a pulp or paper manufacturing facility. This typically involves working in a facility with complex integrated equipment and continuous operations.</p> <p>No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Pulp and Paper Manufacturing (PPM)

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 faults	1.1 Identify faults in pulping processes according to productivity requirements, relevant workplace health and safety procedures, risks and hazards identification and environmental workplace procedures 1.2 Interpret alarm systems and observations to determine faults and location 1.3 Identify faults through routine physical inspections of plant, processes and equipment 1.4 Interpret sampling and results to identify variations from specifications or schedule 1.5 Use appropriate techniques to identify and locate cause and source of the problem 1.6 Access and analyse relevant data, as required to assist analysis 1.7 Select, fit, use and maintain personal protective equipment according to job requirements and task to be undertaken
2. Rectify plant faults	2.1 Conduct operator level on-line adjustments 2.2 Implement isolation procedures and plant shut down prior to fault rectification according to work health and safety and standard operating procedures 2.3. Isolate, by-pass, repair or replace faulty plant, according to manufacturer's recommendations 2.4. Return plant to normal operation 2.5 Communicate verification to relevant personnel
3. Rectify product quality faults	3.1. Identify by observation, systematic sampling and testing, product quality faults or variations 3.2. Interpret test results and adjust operations to correct faults 3.3. Rectify faults and causes or make recommendations for further action 3.4. Manage out-of-specification product

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
4. Record and report process performance and product quality data	4.1 Identify recording and reporting workplace requirements for process performance and product quality data 4.2 Document variations from product specification 4.3 Record process variation and faults 4.4 Record actions undertaken to troubleshoot and rectify faults 4.5 Communicate relevant information to appropriate personnel

Foundation Skills	
<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>	
Skill	Description
Reading	<ul style="list-style-type: none"> Interpret specifications, procedure manuals and test results.
Writing	<ul style="list-style-type: none"> Record and report test results and rectifications accurately and legibly using correct technical vocabulary Access, navigate and enter computer based information
Numeracy	<ul style="list-style-type: none"> Interpret instruments, gauges and data recording equipment Use measuring equipment
Oral communication	<ul style="list-style-type: none"> Select and use appropriate spoken communication strategies with work colleagues and other personnel on site
Navigate the world of work	<ul style="list-style-type: none"> Use electronic and other control systems to control equipment and processes and make appropriate adjustments for troubleshooting processes
Get the work done	<ul style="list-style-type: none"> Maintain situational awareness in the work area Analyse and use sensory information to adjust process to maintain and co-ordinate safety, quality and productivity

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
PPMPUL440 Troubleshoot and rectify pulping processes Release 2	PPMPUL440 Troubleshoot and rectify pulping processes Release 1	Performance criteria added, minor changes to knowledge evidence	Equivalent unit

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

TITLE	Assessment requirements for PPMPUL440 Troubleshoot and rectify pulping processes
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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, at least twice in line with required enterprise intervals, relevant to pulping processes
- followed safe working practices when troubleshooting and rectifying pulping processes
- selected and used appropriate troubleshooting methods in pulping processes
- used and interpreted electronic control systems, including digital control system, touch screens or robotics to control equipment and processes as required during troubleshooting
- communicated effectively by verbal and written means and work safely with others in the work area when rectifying pulping processes.

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
- pulping plant, processes and associated services sufficient to troubleshoot including plant layout, operating principles and causes and effects of adjustments made to pulping plant and processes
- maintenance system as it applies to pulping operations
- troubleshooting methods that can be applied across system and problem faults in pulping operations
- causes and effects of unplanned shutdown and appropriate responses
- operating overhead cranes
- electronic and other control systems, operation and application to make appropriate adjustments that control pulping operations.

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 tools, equipment and resources require to identify and rectify faults in pulping operations in a pulp or paper manufacturing facility
 - electronic control systems which including portable, touch screens or robotics
 - PPE required for troubleshooting and operating pulping processes and systems
- specifications:
 - sample workplace documentation on workplace health and safety procedures, risks and hazards identification procedures, environmental and safe working requirements/practices, standard operating procedures and housekeeping requirements.

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

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