## **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.

PPMPUL330	Coordinate and implement pulping plant shutdowns
Application	This unit of competency describes the skills and knowledge required to coordinate and implement pulping plant shutdowns (both planned and unplanned) in the pulp and paper industry.
	This unit applies to operators and technicians who coordinate and implement pulping plant shutdowns, in a pulp or paper manufacturing facility. This typically involves working in a facility with complex integrated equipment and continuous operations.
	No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.
Prerequisite Unit	Nil
Unit Sector	Pulp and Paper Manufacturing (PPM)

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Coordinate and implement planned	1.1 Coordinate planned and scheduled shutdown using work instructions and related planned maintenance information
shutdowns	<ul><li>1.2 Assess the impact of planned shutdown on operations and productivity</li><li>1.3 Communicate shutdown information to relevant personnel according to standard operating procedures (SOP)</li></ul>
	<ul><li>1.4 Shutdown and isolate equipment and process according to SOP</li><li>1.5 Select, fit, use and maintain personal protective equipment according to job requirements and task to be undertaken</li></ul>
2. Respond to unplanned shutdowns	<ul> <li>2.1 Respond to unplanned faults and stoppages according to SOP, emergency and workplace health and safety procedures</li> <li>2.2 Complete shutdown and isolation according to SOP</li> <li>2.3 Locate and rectify cause of unplanned shutdown within area of responsibility according to SOP</li> <li>2.4 Communicate shutdown information to relevant personnel</li> </ul>
3. Record and report shutdown information	<ul> <li>3.1 Record shutdown information, including corrective action according to SOP/organisational requirements</li> <li>3.2 Report shutdown information to relevant personnel</li> </ul>

## 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	<ul> <li>Interpret shutdown documentation, including SOP, manuals, checklists, drawings and signage</li> </ul>	
Writing	<ul> <li>Record shutdown information via electronic and standard written proformas</li> </ul>	
Oral communication	<ul> <li>Communicate pulping plant shutdown phases by radio, telephone and face to face</li> </ul>	
Numeracy	<ul> <li>Interpret control system data and information to shutdown and isolate equipment and processes and to locate faults and other causes of unplanned shutdowns</li> </ul>	
Get the work done	<ul> <li>Maintain situational awareness in work area</li> <li>Rectify faults and other causes of unplanned shutdowns</li> <li>Use systematic approach to planning shutdown activity, identifying requirements for each stage</li> </ul>	

Code and title current version	Code and title previous version	Comments	Equivalence status
PPMPUL330	PPMPUL330 Co-	Performance criteria	Equivalent unit
Coordinate and	ordinate and	added, minor changes	
implement pulping	implement pulping	to knowledge evidence,	
plant shutdowns	plant shutdowns	grammatical adjustment	
Release 2	Release 1	to title	

d0ac-40bc-a69e-72a600d4fd93

https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=12998f8d-

Performance Evidence         An individual demonstrating competency must satisfy all of the elements and performance criteria in unit. There must be evidence that the individual has:         • coordinated and implemented shutdowns at least twice in line with required enterprise intervals least one of the following areas:         • bleaching plant operations         • refining         • chip preparation         • cleaning or washing systems         • chemical preparation and treatment         • pulp lapping production         • digester operations         • recorded to unplanned shutdowns         • operated control systems to shut down and isolate equipment and processes         • located and reported shutdown information verbally and in writing         • demonstrated safe use and handling of chemicals and materials when implementing pulping pla shutdowns.         Knowledge Evidence         An individual must be able to demonstrate the knowledge required to perform the tasks outlined in t 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         • pergency procedures and responses<	TITLE	Assessment requirements for PPMPUL330 Coordinate and implement pulping plant shutdowns	
unit. There must be evidence that the individual has: coordinated and implemented shutdowns at least twice in line with required enterprise intervals least one of the following areas: bleaching plant operations refining chip preparation cleaning or washing systems chemical preparation and treatment pulp lapping production digester operations operated control systems to shut down and isolate equipment and processes located and rectified problems associated with shutdowns to ensure safety quality and productior recorded and reported shutdown information verbally and in writing demonstrated safe use and handling of chemicals and materials when implementing pulping plat shutdowns. <b>Knowledge Evidence</b> An individual must be able to demonstrate the knowledge required to perform the tasks outlined in t 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 job aftery analysis documentation and processes high risk load shifting licensing requirements where relevant major hazard facility requirements where relevant major hazard facility requirements where relevant major hazard facility requirements where relevant pulping plant, processes, layout and associated services to carry out planned shutdown activitie within level of responsibility reasons for planned or scheduled pulping plant shutdowns	Performance Evidence		
<ul> <li>Knowledge Evidence</li> <li>An individual must be able to demonstrate the knowledge required to perform the tasks outlined in t elements and performance criteria of this unit. This includes knowledge of:</li> <li>organisational procedures relevant to workplace health and safety with particular emphasis on:</li> <li>use of personal protective equipment (PPE)</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> <li>plant permit systems and processes</li> <li>high risk load shifting licensing requirements where relevant</li> <li>major hazard facility requirements where relevant</li> <li>pulping plant, processes, layout and associated services to carry out planned shutdown activitie within level of responsibility</li> <li>reasons for planned or scheduled pulping plant shutdowns</li> </ul>	unit. There must be evi coordinated and im least one of the foll bleaching plant refining chip preparatio cleaning or was chemical prepa pulp lapping pr digester operat responded to unpla operated control sy located and rectifie recorded and repor	dence that the individual has: plemented shutdowns at least twice in line with required enterprise intervals, for a owing areas: operations n shing systems ration and treatment oduction ions nned shutdowns stems to shut down and isolate equipment and processes d problems associated with shutdowns to ensure safety quality and productivity ted shutdown information verbally and in writing	
<ul> <li>elements and performance criteria of this unit. This includes knowledge of:</li> <li>organisational procedures relevant to workplace health and safety with particular emphasis on:</li> <li>use of personal protective equipment (PPE)</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> <li>plant permit systems and processes</li> <li>high risk load shifting licensing requirements where relevant</li> <li>major hazard facility requirements where relevant</li> <li>pulping plant, processes, layout and associated services to carry out planned shutdown activitie within level of responsibility</li> <li>reasons for planned or scheduled pulping plant shutdowns</li> </ul>	Knowledge Evider	nce	
<ul> <li>emergency procedures and responses</li> <li>job safety analysis documentation and processes</li> <li>plant permit systems and processes</li> <li>high risk load shifting licensing requirements where relevant</li> <li>major hazard facility requirements where relevant</li> <li>pulping plant, processes, layout and associated services to carry out planned shutdown activitie within level of responsibility</li> <li>reasons for planned or scheduled pulping plant shutdowns</li> </ul>	elements and performa organisational proc use of persona equipment lock	nce criteria of this unit. This includes knowledge of: edures relevant to workplace health and safety with particular emphasis on: I protective equipment (PPE) out and isolation procedures	
<ul><li>within level of responsibility</li><li>reasons for planned or scheduled pulping plant shutdowns</li></ul>	<ul> <li>emergency pro</li> <li>job safety analy</li> <li>plant permit system</li> <li>high risk load so</li> </ul>	cedures and responses /sis documentation and processes stems and processes hifting licensing requirements where relevant	
<ul> <li>jamming, air supply, control system failure</li> <li>required responses to unplanned shutdowns to ensure safety, quality and productivity</li> </ul>	<ul> <li>pulping plant, proce within level of response reasons for planne causes of unplanne jamming, air supply</li> </ul>	esses, layout and associated services to carry out planned shutdown activities onsibility d or scheduled pulping plant shutdowns ed shutdowns including power outage, mechanical breakdown, blockages, y, control system failure	

- productivity considerations including waste minimisation, delay minimisation, chemical recovery maximisation, line speed, handovers, quality checks, output targets
- workplace process and procedures for plant shutdowns and unplanned shutdowns
- pulping plant and machinery functions and operations
- workplace emergency procedures and responses relevant to pulping plants
- process control operations related to planned and unplanned shutdowns.

## **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 chemicals and equipment required to coordinate and implement the shutdown of pulping operations in a pulp or paper manufacturing facility
  - test and diagnostic equipment
  - PPE required for implementing pulping plant shutdowns

## **Assessment Conditions**

- specifications:
  - template documents for recording shutdown information.

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

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