



Australian Government

PPMRES340 Troubleshoot and rectify primary resource operations

Release: 1

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Modification History

Release	Comment
1	Replaces equivalent unit FPPRES340A Troubleshoot and rectify primary resource operations, which was first released with FPP10 Pulp and Paper Manufacturing Industry Training Package Version 1.0. This is the first release of this unit in the new standards format.

Application

This unit of competency describes the outcomes required to identify, diagnose and rectify primary resource operations, in a pulp or paper manufacturing facility.

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

Licensing, legislative, regulatory, or certification requirements apply to this unit in some states and territories at the time of publication and may differ according to jurisdiction.

Pre-requisite Unit

Nil

Unit Sector

Pulp and Paper Manufacturing

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.
1. Identify and diagnose causes of process variation, plant or equipment faults	1.1. Check and plan work within workplace health and safety (WHS) procedures, risks and hazards identification, environmental sustainability procedures and Standard

ELEMENTS	PERFORMANCE CRITERIA
	Operating Procedures (SOP). 1.2. Interpret visual assessments and machine alarms to determine fault type and location. 1.3. Undertake routine physical inspections of plant and process to identify faults. 1.4. Identify and locate causes and sources of process variation, plant or equipment faults, using appropriate techniques. 1.5. Access and analyse relevant historical and operational data to confirm diagnosis.
2. Rectify process variation, plant or equipment faults	2.1. Initiate emergency stop or shutdown, isolation and lockout procedures prior to fault rectification. 2.2. Isolate, repair or replace faulty equipment or instrumentation. 2.3. Implement corrective operational adjustments and operator level maintenance requirements. 2.4. Restore to normal operations and communicate to relevant personnel.
3. Identify and rectify product quality faults	3.1. Identify product faults or variations by observation, systematic sampling and testing. 3.2. Manage out-of-specification production. 3.3. Check load weight and dimensions to ensure they fall within the capacity of the equipment. 3.4. Take samples for tests to detect quality faults. 3.5. Conduct required tests. 3.6. Interpret test results, adjust operations to correct variations or make recommendations for further action.
4. Record and report troubleshooting activities	4.1. Document variations from specifications and machine operating faults. 4.2. Undertake assessment and evaluation of causes of deviations and document corrective actions. 4.3. Communicate relevant information to appropriate personnel.

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Numeracy skills to:	• interpret instruments, gauges and data recording equipment • use measuring equipment and undertake calculations to aid troubleshooting.
Oral communication skills to:	• select and use appropriate spoken communication strategies with work colleagues and other personnel on site, to assist with analysis and resolution of operational problems.
Reading skills to:	• read and interpret equipment specifications, work place documentation, and procedures.
Writing skills to:	• record and report test results and rectifications accurately and legibly, using correct technical vocabulary.
Technology skills to:	• access, navigate and enter computer-based information • use electronic and other digital control systems to control equipment and processes.
Problem solving skills to:	• maintain situational awareness in the work area • analyse and use sensory information to adjust process and to maintain and co-ordinate safety, quality and productivity.

Range of Conditions

Not Applicable

Unit Mapping Information

FPPRES340A Troubleshoot and rectify primary resource operations

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingPackages.aspx/Pages/Home.aspx>

Assessment Requirements for PPMRES340 Troubleshoot and rectify primary resource operations

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1	Replaces equivalent unit FPPRES340A Troubleshoot and rectify primary resource operations, which was first released with FPP10 Pulp and Paper Manufacturing Industry Training Package Version 1.0. This is the first release of this unit in the new standards format. Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement.

Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit, and must be able to provide evidence that they can:

- troubleshoot and rectify primary resource operations, at least twice in line with required enterprise intervals, where corrective action on addresses equipment and product faults
- plan and safely diagnose causes and sources of process variation, plant, equipment and product faults
- communicate effectively, through written and verbal means, the corrective actions undertaken
- use safety accessories including protective and high visibility, safety clothing and electronic communication equipment when working with primary resource operations.

Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- troubleshooting methods that can be applied across system and quality faults for primary resource operations in the pulp and paper industry
- relevant documentation and procedures to troubleshoot primary resource operations in the pulp and paper industry including:
 - work health and safety (WHS) procedures, including high risk load shifting, licensing requirements, plant clearance, job safety analysis and permit systems
 - Standard Operating Procedures (SOP)
 - productivity requirements and quality procedures
 - environmental sustainability requirements and practices

- plant manufacturing operating manuals and plant isolation documentation
- enterprise policies and procedures and guidelines
- oil or chemical spills and disposal guidelines
- weighbridge dockets, work orders, invoices, tally sheets and truck delivery dockets
- non-conformance and test results and reports
- log sheets (production and equipment) and equipment performance data
- tonnage, input and conversion
- sampling and test reports
- Material Safety Data Sheets (MSDS)
- pile survey documents and process and instrument diagrams
- processes and associated services of primary resource operations, sufficient to troubleshoot including:
 - plant layout
 - theory of operation
 - causes and effects of adjustments made to primary resource handling plant and processes
 - relationships between primary resource handling system, processes and associated services
- the use of materials and supplies including hardwood or softwood logs, lapped pulp, waste paper, woodchips and parts in primary resource operations
- use and purpose of testing equipment including drying ovens, sizing screens and computer processing equipment
- appropriate and safe use of attachments including fork lift attachments, crane hooks, chains, slings and straps, grabs and winches
- the purpose, standards and procedures as per site agreement, of sampling and testing process for plant and system operations, and process monitoring
- types, causes and effects of plant shutdowns on primary resource operations
- key features of maintenance systems including operator level maintenance as per site agreements, operator maintenance schedules, maintenance suppliers and pro-active maintenance strategies.

Assessment Conditions

The following resources must be made available:

- access to the full range of equipment required to detect and address faults associated with primary resource operations in a pulp or paper manufacturing facility
- applicable work health and safety (WHS) and isolation work place procedures, environmental guidelines and safe working requirements, risks and hazard identification and workplace housekeeping requirements
- personal protective equipment required for operating machinery and equipment and fault rectification for the woodchip production system
- relevant personnel for the purposes of communicating information

- electronic control systems which includes Digital Control System (DCS), touch screens or robotics required to operate the woodchip production system
- sample workplace documentation, procedures and reports including SOP, quality procedures, environmental sustainability requirements/practices, plant manufacturing operating manuals, enterprise policies and procedures, oil or chemical spills and disposal guidelines, plant isolation documentation and safe work documentation

Competency is to be assessed in the workplace or in a productive environment that accurately reflects performance in a workplace.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.

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