



Australian Government

**Assessment Requirements for PPMSTM440
Troubleshoot and rectify boiler plant
systems**

Release: 2

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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.

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 causes and effects of faults and corrective action on associated processes for the boiler plant system, at least twice in line with required enterprise intervals
- identified system quality and equipment faults within level of responsibility
- implemented isolation and access procedures
- identified and rectified faults in boiler plant systems
- maintained a clean and hazard free work area
- recorded and reported on operational data
- communicated effectively, through written and verbal means, the corrective actions undertaken.

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
- troubleshooting methods that can be applied across boiler plant system faults
- implications of pre operational checks including:
 - low water level alarm
 - high water level alarm
 - low water level
 - alarm lockout
 - hydrostatic test
 - burner management system
 - safety valve test
- documentation and procedures relevant to troubleshooting steam boiler operations, in the pulp and paper industry including:
 - appropriate boiler or pressure vessel operator certification
 - confined space standards and regulations
 - productivity requirements and quality procedures
 - environmental sustainability requirements and practices
 - machinery and plant manufacturing operating manuals
 - enterprise policies and procedures
 - manufacturer's specifications and maintenance documentation
 - safety data sheets
 - operator's log and job sheets
 - incidents reports
- steam generation system, processes and associated services sufficient to troubleshoot including:
 - plant layout
 - theory of operation
 - causes and effects of adjustments made to steam generation plant and processes
 - relationships between steam generation system, processes and associated services
- the use of materials and supplies for boiler plant systems including:
 - chemicals
 - coal
 - oil
 - gas
 - additives
 - air
 - water
 - wood waste
 - steam recovery process products
 - power

- key features of maintenance systems including:
 - operator level maintenance as per site agreements
 - operator maintenance schedules
 - maintenance suppliers
 - pro-active maintenance strategies
- use of boiler water treatment system and reasons for treatment
- use of electronic and other control systems, operation and application to make appropriate adjustments that control boiler plant 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 equipment required for detecting and addressing faults associated with steam generation operations in a pulp or paper manufacturing facility
 - electronic control systems which includes digital control system, touch screens or robotics required for steam boiler operation
 - PPE suitable for troubleshooting steam boiler operations
- specifications:
 - applicable workplace health and safety and isolation work place procedures, environmental guidelines and safe working requirements, risks and hazard identification and workplace housekeeping requirements
 - sample workplace documentation, procedures and reports including standard operating procedures, quality procedures, environmental sustainability requirements/practices, plant manufacturing operating manuals, enterprise policies and procedures, oil or chemical spills and disposal guidelines, plant isolation documentation, safe work documentation.

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>