



Australian Government

Department of Education, Employment and Workplace Relations

FPPSTM3A Shutdown and store steam boiler

Release: 1

FPPSTM3A Shutdown and store steam boiler

Modification History

Not applicable.

Unit Descriptor

Not applicable.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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Element	Performance Criteria
1 Prepare boiler for controlled shutdown.	1.1 Maintenance/rectification requirements are identified and reported in accordance with Standard Operating Procedures (SOP).
	1.2 Appropriate isolations/lock-outs are initiated.
	1.3 Boiler and ancillary plant are shutdown in

- compliance with SOP.
- 1.4 Work is completed within OH&S, SOP, environmental and safe working requirements and practices.
- 2 **Conduct boiler inspection/maintenance.**
- 2.1 Boiler is prepared for inspection in accordance with SOP.
- 2.2 Condition of boiler is established to ensure safe removal of equipment.
- 2.3 Hydrostatic test is conducted in accordance with SOP and monitoring requirements.
- 2.4 Inspections and maintenance is carried out according to SOP and statutory requirements.
- 2.5 Internal/external cleaning of boiler and fittings are undertaken.
- 2.6 Work is completed within OH&S, SOP, environmental and safe working requirements and practices.
- 3 **Store boiler in shutdown mode.**
- 3.1 Storage time and condition of storage are established.
- 3.2 Boiler is stored in a safe condition for access in accordance with manufacturer's specifications and SOP.
- 3.3 Stored boiler water and chemicals are analysed and handled in accordance with SOP when boiler is stored for extended periods.
- 3.4 Work is completed within OH&S, SOP, environmental and safe working requirements and practices.
- 4 **Respond to crash/emergency shutdowns.**
- 4.1 Crash is responded to immediately in accordance with SOP.
- 4.2 Emergency conditions are complied with in accordance with legislative and enterprise procedures.
- 4.3 Cause of crash is identified and located where possible.

- 4.4 Immediate safety of personnel and plant is ensured in compliance with SOP.
- 4.5 Continuing plant operation is monitored and maintained in safe working conditions and customers are notified.
- 4.6 Relevant personnel are notified to rectify and make plant ready for restart.
- 4.7 Work is completed within OH&S, SOP, environmental and safe working requirements and practices.

Required Skills and Knowledge

Not applicable.

Evidence Guide

Explains and implements isolation and access procedures.
Describes plant layout and status identification.
Explains purpose and operation of plant and systems.
Reads and interprets instruments, gauges and data recording equipment.
Conducts pre-operational checks.
Starts up and operates boiler system.
Explains causes and effects of shutdowns.
Describes shutdown responses and procedures.
Implements boiler store/bank procedures.
Reads and interprets specifications and customer orders.
Reports and documents information.
Uses effective verbal and written communication.
Explains boiler water treatment system and reasons for treatment.
Explains statutory responsibilities.
Responds to shutdowns immediately and appropriately as per SOP.
Maintains compliance with all OH&S requirements.
Demonstrates ability to safely store/bank boiler, if applicable, and maintains status according to SOP.
Boiler is consistently set-up and/or re-started within specified time.
Conducts all pre-start checks and procedures.
Handles and/or rectifies start up problems in accordance with SOP or site agreements.
Maintains documentation requirements.
Works within OH&S, SOP, environment and safe working requirements and practices.
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Range Statement

Range Statement

The competencies described in this group of units relate to those functions inclusive of the following boiler types:

Please note:

A single Range Statement has been prepared to cover all Units in Steam Generation. The actual context/conditions for each Unit would be drawn from the mill's customised version of this Range Statement.

- . fire tube
- . saturated boiler
- . water tube
- . super heated

and may be operated in conjunction with other steam driven plant and operations including:

- . paper making machines
- . turbines
- . digesters
- . heating plant

Materials/supplies:

- . chemicals
- . coal
- . oil
- . gas
- . additives
- . air
- . water
- . wood waste
- . steam
- . recovery process products
- . power

Equipment:

Equipment appropriate to steam generation processes and may include the following:

- . boiler and auxiliary plant
- . boiler heating systems
- . fuel and fuel delivery system plant
- . dust removal and combustion waste
- . fuel management system
- . extraction systems
- . water distribution systems
- . compressed air systems
- . steam temperature control plant
- . chemical dosing system
- . water treatment system
- . flare detection equipment
- . hand and power tools

Legislation, policy and procedures:

- . OH&S
- . environmental and statutory legislation

- . enterprise policies and procedures
- . Standard Operating Procedures (SOP)
- . appropriate boiler/pressure vessel operator certification

Documentation/procedures/reports:

- . SOP
- . job sheets
- . grade specifications
- . manufacturer's specifications
- . maintenance logs
- . statutory requirements
- . Materials Safety Data Sheets (MSDS)
- . operator's log
- . process and instrument diagrams

Maintenance:

- . as per site agreement
- . maintenance schedules
- . maintenance systems

Sampling/testing: [excludes FPPSTM3A]

- . feed water quality
- . assessments of process operations

Technology:

- . fully automated, semi automated, manually operated plant and equipment
- . enter/extract computer data, electronic screens and alarms, analogue and digital instrumentation

Communication channels:

- . internal/external customers and suppliers
- . statutory authorities
- . team members
- . maintenance/services co-ordinators
- . maintenance services

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Unit Sector(s)

Not applicable.