



Australian Government

FWPCOT3333 Conduct heat plant operations

Release: 1

FWPCOT3333 Conduct heat plant operations

Modification History

Release	Comments
Release 1	This version released with FWP Forest and Wood Products Training Package Version 8.0.

Application

This unit of competency describes the skills and knowledge required to prepare for, start up, operate, shut down and store an energy producing heat plant.

The unit applies to individuals who operate heat plants in a timber or wood products production facility.

All work must be carried out to comply with workplace procedures, according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Common Technical (COT)

Elements and Performance Criteria

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. Prepare for heat plant operations	1.1 Determine job requirements from work order or instruction and, where required, check with appropriate personnel 1.2 Confirm workplace health and safety and environmental protection practices and/or procedures and emergency procedures relevant to task 1.3 Identify hazards, assess risks and determine control measures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	associated with energy generating heat banks 1.4 Select appropriate personal protective equipment and check for operational effectiveness 1.5 Identify and set quantity of energy to be generated for allocated process as specified in work order 1.6 Check heat plant chemicals for correct labelling to ensure compliance with health and safety procedures and regulatory requirements 1.7 Complete pre-operational safety and pre-start-up checks to ensure operational effectiveness of heat plant
2. Operate and monitor heat plant	2.1 Start heat plant according to workplace procedures 2.2 Assess heat plant condition for anomalies during start-up, and rectify or report to relevant personnel according to workplace procedures 2.3 Monitor heat plant operation, diagnose status and adjust to maintain safe and efficient operation 2.4 Shut down heat plant in cases of fire according to emergency procedure 2.5 Record and report heat plant operations and fuel efficiency to appropriate personnel
3. Shut down and store heat plant	3.1 Isolate and shut down heat plant according to workplace health and safety procedures 3.2 Remove or replace valves and fittings according to workplace procedures, if required 3.3 Maintain cleanliness of heat plant and plant room according to workplace procedures 3.4 Select storage mode and store heat plant according to workplace procedures 3.5 Record and report equipment faults and maintenance requirements to appropriate personnel

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	Interpret routine technical documents and instruction manual for heat plant
Writing	Complete routine records for heat plant operations, equipment faults and maintenance requirements
Oral communication	Ask questions and actively listen to clarify contents of operational orders
Numeracy	- Interpret basic numerical machine settings, gauges and data recording equipment - Record numerical data involving fuel efficiency - Measure and record chemical usage

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPCOT3333 Conduct heat plant operations	FWPCOT3232 Operate heat plant	Redesigned unit that includes content from FWPCOT3232 Operate heat plant and FWPCOT4207 Plan and coordinate heat plant operations	Not equivalent
FWPCOT3333 Conduct heat plant operations	FWPCOT4207 Plan and coordinate heat plant operations	Redesigned unit that includes content from FWPCOT3232 Operate heat plant and FWPCOT4207 Plan and coordinate heat plant operations	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPCOT3333 Conduct heat plant operations

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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 prepared for, started up, monitored and shut down heat plant operations for a timber or wood products production facility for two production cycles with different specified energy generation requirements.

In performing this task, the individual has:

- followed workplace health and safety requirements
- conducted pre-operational checks on heat plant
- diagnosed and adjusted control settings during operation
- identified and rectified or reported heat plant operating faults
- handled and labelled heat plant chemicals correctly
- prepared heat plant for periodic inspection
- completed operational and maintenance reports.

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:

- environmental protection requirements and practices for heat plant operations, including:
 - cleaning plant, tools and equipment
 - disposing of hazardous substances
- characteristics and dangers of heat and energy generated by heat plants
- purpose, features and operation of energy generating heat plants
- energy generation capacity of workplace heat plants
- processes for heat plant start-up, shutdown, cleaning and storage
- range of data used to evaluate heat plant performance, including:
 - heat levels
 - pressure levels

- energy generation levels
- heat build-up
- system overload information
- monitor fuel usage
- past performance records
- types, uses and labelling of heat plant chemicals, including safe handling and storage
- methods used to:
 - monitor operation and diagnose status of heat plant
 - remove valves and fittings
 - clean plant and plant room
- workplace procedures specific to operating heat plants, including:
 - health and safety, with particular emphasis on emergency shutdown, equipment lock-out and use of personal protective equipment
 - communication reporting lines
 - recording and reporting on operational and fuel efficiency data, equipment faults and maintenance requirements.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a timber processing plant, a timber manufacturing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - energy generating heat plant
 - heat plant chemicals and labels
 - valves and tools for replacing valves
 - personal protective equipment suitable for operating heat plants
- specifications:
 - workplace procedures for operation of energy generating heat plants
 - templates for documenting relevant information on heat plant operations
 - manufacturer safety data sheets for chemicals used in heat plant operations
 - workplace health and safety and environmental protection policies and/or procedures applicable to energy generating heat plants.

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

Links

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