



Australian Government

MEM13007 Maintain water treatment systems for cooling towers

Release: 1

MEM13007 Maintain water treatment systems for cooling towers

Modification History

Release 1. Supersedes and is equivalent to MEM13007B Maintain water treatment systems for cooling towers

Application

This unit of competency defines the skills and knowledge required to test water treatment as specified by AS/NZS 3666:2011 Air-handling and water systems of buildings, or equivalent, measure water properties, and maintains reticulation/treatment systems.

Where interpretation of technical drawings is required unit MEM09002 Interpret technical drawing should also be selected.

Where the selection and use of engineering measurement is required unit MEM12023 Perform engineering measurements should also be selected.

Where the selection and use of power tools/hand held operations is required unit MEM18002 Use power tools/hand held operations should also be selected.

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

Band: A

Unit Weight: 2

Pre-requisite Unit

MEM11011	Undertake manual handling
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools

Competency Field

Work health and safety

Elements and Performance Criteria

Elements describe the essential outcomes. Performance criteria describe the performance needed to demonstrate achievement of the element.

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1	Determine job requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify job requirements from specifications, job sheets or work instructions
2	Apply principles of AS/NZS 3666:2011 Air-handling and water systems of buildings, or equivalent	2.1	Explain causes of corrosion, scale, algae and treatment/prevention
		2.2	Explain air distribution of cooling towers
3	Assess reticulation system	3.1	Assess relevant water conditions against specifications using test equipment according to SOPs
		3.2	Assess condition of water circulation system and determine appropriate action
		3.3	Assess performance of regulating, filtering, conditioning/dosing and pumping systems against specification
4	Measure relevant water properties	4.1	Use and apply test equipment according to SOPs
		4.2	Determine/record water properties
5	Maintain reticulation/treatment systems	5.1	Record water temperature control system and report non-compliances
		5.2	Adjust dosing to specification
		5.3	Report faults to appropriate personnel according to SOPs

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Relevant water conditions include one (1) or more of the following:

- acidity
- alkalinity
- microbial
- corrosion

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM13007B Maintain water treatment systems for cooling towers

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>