



Australian Government

Assessment Requirements for FBPSUG2023

Operate a cooling water system

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 2.0.

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 operated a cooling water system in line with workplace contexts and demonstrated each of the following points at least once:

- followed set up and start-up procedures
- selected, fitted and used required personal protective equipment (PPE)
- operated, monitored and adjusted cooling water system operation according to procedures
- maintained work area to meet cleaning standards
- reported health and safety risks and maintenance requirements
- cleaned and shut down the cooling water system according to procedures
- taken corrective action in response to typical operating faults, out-of-specification results or non-compliance
- recorded cooling water system information.

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:

- purpose and principles of evaporative cooling and water treatment to prevent corrosion and microbiological fouling
- equipment purpose and operating principles of cooling water system and related equipment, including pumps, valves, tower and fans and dosing system
- cooling water system layout
- purpose of chemicals used for operating a cooling water system
- water quality test procedures for operating a cooling water system
- the effect of make-up water quality on blow down rates and fouling rates
- typical causes of water contamination, and corrective action
- typical causes and consequences of system fouling

- key health and safety requirements for a cooling water system:
 - hazards related to cooling water system operation, and associated control measures
 - correct use of PPE
 - methods used to render equipment safe to inspect, maintain and/or clean, including lock-out, tag-out and isolation procedures
- procedures for operating the emergency cooling water system
- environmental issues and controls, including those relating to chemical and/or container disposal and any overflow of the system to waters of the state
- recording requirements and procedures relevant to operating a cooling water system
- cleaning standards for maintaining the equipment and work area.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a sugar milling workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - PPE
 - cooling water system and related equipment
 - chemicals
 - test equipment
 - communication system
- specifications:
 - relevant standard operating procedures and related advice on equipment operation
 - workplace cleaning standards for the work area workplace information requirements and procedures.

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

Links

Companion Volume Implementation Guides are found in VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>