



Australian Government

Assessment Requirements for FBPOPR2034 Operate an evaporation process

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated an evaporation process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- preparing materials for an evaporation process
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting evaporation equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - temperatures
 - vacuum
 - motor amperage
 - condensate flow
 - steam flow and pressure
 - throughput
 - time/speed

- evaporated product characteristics
- monitoring supply and flow of materials to and from the evaporation process
- taking corrective action in response to out-of-specification results
- reporting and/or recording corrective action as required
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- preparing equipment for cleaning
- responding to and/or reporting equipment failure within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

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 basic principles of evaporation, including:
 - an understanding of the principles of steam
 - the relationship between boiling point and pressure as applied to evaporation
 - the changes that occur to product as it moves through the evaporation process
- basic operating principles of evaporation equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- quality characteristics to be achieved by the evaporation process
- the flow of the evaporation process and the effect of product output on downstream processes
- quality requirements of materials and the effect of variation on process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- techniques used to monitor the evaporation process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures relevant to the evaporation process

- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to the evaporation process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the evaporation process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for evaporation equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - evaporation process and related equipment and services
 - materials to be evaporated
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule, batch/recipe instructions
 - documentation and recording 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 Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>