



**Australian Government**

# **Assessment Requirements for FBPOPR2045 Operate pumping equipment**

**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 pumping equipment on at least one occasion, including:

- accessing workplace information to identify pumping requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of materials to be pumped and necessary services
- conducting pre-start checks, including:
  - inspecting pump flanges, gaskets and seals to identify any signs of wear
  - checking related valve assemblies to identify any signs of leaks
  - cancelling isolation or lock-outs (where pumps have variable settings that involve selecting appropriate settings and confirming that related pipework is correctly configured for pumping requirements)
- monitoring and adjusting pump operation, including identifying variation in amperage and adjusting pump speeds/flow rates to meet pumping requirements
- monitoring supply and flow of materials to and from the pump
- following isolation and lock-out/tag-out procedures to take pumps and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- responding to and/or reporting pump equipment failure within level of responsibility
- locating stop and reset functions on pumps
- maintaining work area to meet housekeeping standards
- operating pumps using process control systems according to workplace procedures
- cleaning pumps and related equipment according to workplace procedures
- following relevant work health and safety requirements.

## 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:

- basic operating principles of pumps and related equipment, including:
  - main pump components
  - status and purpose of guards
  - pump system configuration, including valves, taps and pipework
- the effect of pumping system design on operating performance, including flow resistance, pressure and head
- operating capacities of pumps used in the work area, including different pump types to perform pumping operations
- effect of raw material characteristics on pump performance, including variables that include soluble solids, temperature and viscosity
- effect of pump operating parameters on product/materials pumped
- corrective action required where pump operation is outside specified operating parameters
- typical equipment faults and related causes relevant to operating pumping equipment, including:
  - signs and symptoms of faulty equipment
  - early warning signs of potential problems
  - services required
- isolation, lock-out and tag-out procedures and responsibilities required for operating pumping equipment
- work health and safety hazards and controls relevant to operating pumping equipment
- procedures and responsibility for reporting problems
- environmental issues and controls, including action required in the event of significant leaks or spills
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning procedures required for operating pumping 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
  - pumps, related equipment and services
  - materials to be pumped
  - routine preventative maintenance schedule as required
  - 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.

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>