



Australian Government

FBPCEL3011 Operate the reverse osmosis process

Release: 1

FBPCEL3011 Operate the reverse osmosis process

Modification History

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

Application

This unit of competency describes the skills and knowledge required to operate the reverse osmosis process in wine cellar operations.

The unit applies to individuals who take responsibility for their own work using discretion and judgement in the selection and use of available resources.

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

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

Pre-requisite Unit

Nil

Unit Sector

Cellar Operations (CEL)

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 the reverse osmosis process for operation	1.1 Identify and confirm production requirements 1.2 Confirm availability and prepare product to meet reverse osmosis requirements 1.3 Confirm environmental guidelines and identify potential health and safety in the workplace hazards and controls in accordance with

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace procedures 1.4 Select, fit and use personal protective equipment required for production 1.5 Check equipment and confirm readiness for use according to workplace procedures 1.6 Set the process to meet reverse osmosis requirements
2. Operate and monitor the reverse osmosis process	2.1 Start up the reverse osmosis process according to workplace procedures 2.2 Monitor osmosis process to confirm performance is maintained within specification 2.3 Identify and address non-conformance product, process and equipment performance according to workplace procedures
3. Shut down the reverse osmosis process	3.1 Identify and implement appropriate shutdown procedures 3.2 Dismantle equipment safely and prepare for cleaning 3.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures 3.4 Record workplace information according to workplace requirements

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 information from a variety of workplace documents
Writing	Produce workplace documents in required format
Numeracy	- Perform calculations relating to measurements, quantities and operational specifications - Interpret symbols and numbers during monitoring of process
Navigate the world of	Comply with workplace procedures and legislative responsibilities relevant to own role

Skill	Description
work	
Interact with others	• Use required communication mode to report operational information to relevant personnel
Get the work done	• Plan, sequence and implement tasks according to set routines and procedures • Respond to routine problems using workplace instructions and procedures

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCEL3011 Operate the reverse osmosis process	Not applicable	New unit to meet industry requirements	No equivalent unit

Links

Companion Volume Implementation Guides are found in VETNet: -

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

Assessment Requirements for FBPCEL3011 Operate the reverse osmosis process

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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 operated a reverse osmosis process at least once, demonstrating:

- accessing workplace information to identify reverse osmosis requirements
- selecting, fitting and using personal protective equipment
- confirming supply of necessary product and services
- confirming equipment status and condition
- setting up and starting up the reverse osmosis process
- monitoring the process and equipment operation to identify non-conformance results
- taking corrective action in response to non-conformance results
- following equipment shutdown procedures
- preparing equipment for cleaning including draining and dismantling equipment, and removing waste either manually or by rinsing, in preparation for cleaning and sanitation
- conducting work according to environmental and 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:

- purpose and principles of reverse osmosis operation
- links between reverse osmosis and related processes
- stages and changes which occur during reverse osmosis operation
- effect of process stages on end product
- quality characteristics and uses of reverse osmosis product
- product preparation requirements and effect of variation on the process
- main methods used in reverse osmosis process, including:
 - sediment filter

- activated carbon
- reverse osmosis filter
- alcohol reduction
- re blending product
- reverse osmosis equipment and instrumentation components, purpose and operation
- significance and method of monitoring control points within the process
- common causes of variation and corrective action required
- routine shutdown and cleaning preparation requirements
- health and safety hazards and controls
- procedures and responsibility for:
 - reporting problems
 - environmental issues and controls
 - waste handling requirements
 - recording requirements.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a wine operations workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment for reverse osmosis
 - reverse osmosis equipment and materials required for process
 - system for recording and reporting information
- specifications:
 - workplace procedures for reverse osmosis process.

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

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