

**Modification history**

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceuticals Training Package version 3.0.

FBPTEC4XX3	Manage cellar operations
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to manage cellar operations for the production of a fermented beverage.</p> <p>This unit applies to those workers who have responsibility for overseeing the cellar operations of fermented beverages and the quality assurance requirements associated with those products. It may include supervising the work of others.</p> <p>Legislative requirements relating to producing alcohol apply to this unit. Users are advised to check current requirements with the Australian Tax Office and state / territory liquor licensing and health agencies.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Technical (TEC)

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. Ferment wort	1.1 Identify hazards associated with cellar operations and manage risks 1.2 Sanitise fermentation vessel 1.3 Transfer wort to fermentation vessel 1.4 Add adjuncts, in line with specification for final product 1.5 Set time and temperature for fermentation 1.6 Allow wort to ferment for specified time to produce alcohol and flavour 1.7 Conduct standard tests to check product development 1.8 Analyse test results and adjust process as required 1.9 Complete processing and batch records to ensure traceability
2. Mature fermented beverage	2.1 Sanitise maturation vessel 2.2 Transfer product to maturation vessel 2.3 Set time and temperature for maturation to allow flavours to develop 2.4 Allow beverage to mature 2.5 Conduct standard tests to monitor quality and flavour of product 2.6 Analyse test results and adjust process as required 2.7 Complete processing and batch records to ensure traceability
3. Filter fermented beverage	3.1 Sanitise filter 3.2 Check quality of filters and clean or change as required 3.3 Set filtration requirements to meet product requirements 3.4 Pump product through filter into holding tank 3.5 Conduct standard tests to check quality of product and conditions in tank 3.6 Analyse test results and adjust process as required 3.7 Complete processing and batch records to ensure traceability
4. Conduct housekeeping activities	4.1 Clean equipment and work area in line with workplace procedures 4.2 Conduct routine maintenance activities 4.3 Dispose of waste in line with regulatory 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
Numeracy	<ul style="list-style-type: none"> <li>Accurately read and interpret gauges and test results</li> </ul>
Get the work done	<ul style="list-style-type: none"> <li>Identify changes in quality of product and trace source</li> </ul>

**Unit Mapping Information**

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPTEC4XX3 Manage cellar operations		New unit	No equivalent unit

Links	
	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a>

<b>TITLE</b>	<b>Assessment requirements for FBPTEC4XX3 Manage cellar operations</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has managed cellar operations for the production of fermented beverage to meet specification, on at least one occasion.</p>	
<b>Knowledge Evidence</b>	
<p>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:</p> <ul style="list-style-type: none"> <li>• purposes of each stage of cellaring operation</li> <li>• stages and changes required for equipment operation, specific to product</li> <li>• filtering and separation processes, including centrifugation</li> <li>• quality characteristics and uses of end product and output</li> <li>• materials preparation requirements and effect of variation on the equipment operation</li> <li>• typical tests carried out on wort to check pH, alcohol, bitterness, colour, yeast count</li> <li>• instruments used for testing and how each is calibrated</li> <li>• procedures and equipment used for transfer operations, including pumps, membranes, hoses valves, control instruments</li> <li>• equipment and instrumentation components, purpose and operation</li> <li>• significance and method of monitoring control points within the equipment operation</li> <li>• process specification, procedures and operating parameters</li> <li>• common causes of variation and corrective action required</li> <li>• sanitisation procedures and purpose</li> <li>• hazards and controls, including manual handling and working with ethanol</li> <li>• waste handling requirements and procedures</li> <li>• routine maintenance requirements</li> <li>• legislation, regulation and workplace licence requirements related to the production of alcohol, Australian Taxation Office (ATO) in relation to excise tax, waste disposal</li> <li>• recording requirements for traceability of product and taxation office requirements.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions: <ul style="list-style-type: none"> <li>• skills must be demonstrated in a workplace setting or an environment that accurately represents a real workplace</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• wort</li> <li>• fermentation, maturation tanks</li> <li>• testing equipment</li> </ul> </li> <li>• specifications <ul style="list-style-type: none"> <li>• product specifications.</li> </ul> </li> </ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
<b>Links</b>	<p>Companion Volumes, including Implementation Guides, are available at VETNet:  <a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4</a></p>