Modification history

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

| FBPTEC4014 | Manage cellar operations |
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| Application | This unit of competency describes the skills and knowledge required to manage cellar operations for the production of a fermented beverage.  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.  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. |
| Prerequisite Unit | Nil |
| Unit Sector | Technical (TEC) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
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| 1. Ferment wort | 1.1 Identify and apply standards, regulations and guidance materials that cover the risks associated with working hazardous environments, including explosive environments, confined spaces, working with CO2 and working at heights  1.2 Identify specification for product  1.3 Sanitise or clean-in-place (CIP) fermentation vessel  1.4 Transfer wort to fermentation vessel  1.5 Prepare and pitch yeast  1.6 Add adjuncts, in line with specification for final product  1.7 Set time and temperature for fermentation  1.8 Allow wort to ferment for specified time to produce alcohol and flavour  1.9 Conduct standard tests to check product development  1.10 Analyse test results and adjust process as required  1.11 Monitor and record fermentation process  1.12 Complete processing and batch records to ensure traceability |
| 2. Mature fermented beverage | 2.1 Sanitise maturation vessel, as required of process  2.2 Transfer product to maturation vessel, as required of process  2.3 Set time and temperature for maturation to allow yeast to propagate and flavours to develop  2.4 Dry hop as required to product specification  2.5 Add processing aids as required of product specification  2.6 Conduct standard tests to monitor quality and flavour of product  2.7 Analyse test results and adjust process as required  2.8 Complete processing and batch records to ensure traceability |
| 3. Conduct housekeeping activities | 3.1 Clean equipment and work area in line with workplace procedures  3.2 Conduct routine maintenance activities  3.3 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. | |
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| Skill | Description |
| Numeracy | * Accurately read and interpret gauges and test results |
| Get the work done | * Identify changes in quality of product and trace source |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPTEC4014 Manage cellar operations | Not applicable | New unit | No equivalent unit |

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

| TITLE | Assessment requirements for FBPTEC4014 Manage cellar operations |
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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 managed cellar operations for the production of fermented beverages to meet specification, on at least one occasion. | |

| Knowledge Evidence |
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| 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:   * purposes of each stage of cellaring operation * stages and changes required for equipment operation, specific to product * yeast handling parameters * adjuncts typically added to end product, their effects and handling parameters * quality characteristics and uses of end product and output * materials preparation requirements and effect of variation on the equipment operation * typical tests carried out on wort to check pH, alcohol, bitterness, colour, yeast count * instruments used for testing and how each is calibrated * procedures and equipment used for transfer operations, including pumps, membranes, hoses valves, control instruments * dry hops techniques, as required for product * equipment and instrumentation components, purpose and operation * significance and method of monitoring control points within the equipment operation * common causes of variation and corrective action required * sanitisation and clean-in-place procedures and purpose * hazards and controls, including manual handling, working with ethanol, working in confined spaces and with pressure vessels * waste handling requirements and procedures * routine maintenance requirements * Australian Standards, legislation, regulations and workplace licence requirements related to the production and storage of alcohol * Food Standards Code in relation to production of beverages * legislation, regulation and workplace licence requirements related to the production of alcohol, Australian Taxation Office (ATO) in relation to excise tax, waste disposal * recording requirements for traceability of product and taxation office requirements. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a workplace setting or an environment that accurately represents a real workplace * resources, equipment and materials: * wort * fermentation, maturation tanks * testing equipment * specifications * product specifications.   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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