Modification history

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

| FBPBPG4XX2 | Manage filling and packaging of fermented beverages |
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| Application | This unit of competency describes the skills and knowledge required to oversee the set up and operation of a manual filling and packaging process of fermented and carbonated beverages, such as beer or kombucha, into cans, bottles, or kegs.  This unit applies to those workers who have responsibility for overseeing the filling and packaging of beverages and the quality assurance requirements associated with that process.  No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Bottling and Packaging (BPG) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for filling and packaging | 1.1 Identify hazards and manage risks associated with filling and packaging  1.2 Confirm filling and packaging specifications for product  1.3 Confirm type of containers to be filled  1.4 Confirm labelling requirements for product  1.5 Ensure that product, containers and labels are available to meet production requirements  1.6 Ensure that services and staff are available and ready for operation  1.7 Ensure equipment is cleaned, sanitised, prepared and checked to meet filling and packaging requirements  1.8 Complete records to meet company and regulatory requirements |
| 2. Carbonate beverage for bottling or canning | 2.1 Carry out pre-start checks of equipment  2.2 Operate the carbonation equipment to pump carbon dioxide (CO2) into beverage  2.3 Monitor levels of dissolved oxygen  2.4 Monitor equipment to identify any variation in operation and rectify  2.5 Sample beverage to ensure product specifications are being met  2.6 Adjust equipment parameters to ensure product meets specifications |
| 3. Monitor filling, labelling and packaging processes | 3.1 Carry out pre-start checks of filling equipment  3.2 Ensure enough containers and consumables are prepared for quantity to be packaged  3.3 Monitor control points to confirm performance is maintained within specification  3.4 Add sugar for bottle conditioning, as required  3.5 Ensure that filling levels of containers meet specification  3.6 Ensure container seals or seams meet specification  3.7 Pasteurise bottles and cans  3.8 Apply labels to containers  3.9 Monitor equipment to confirm operating condition  3.10 Identify and rectify out-of-specification product, process and equipment performance and rectify |
| 4. Oversee shut down and housekeeping activities | 4.1 Ensure equipment is shut down according to workplace procedures  4.2 Ensure cleaning and maintenance procedures are carried out  4.3 Ensure bottling and packaging activity is recorded in line with organisational requirements  4.4 Order stock to replenish supplies |

| 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 | * Calculations to determine alcohol by volume (ABV) * Calculations to establish the volume of containers * Check filling tolerances of container, in line with Australian Taxation Office (ATO) guidelines * Measure volume using ATO accepted methods |
| Navigate the world of work | * Instructs others and demonstrates work requirements where required |
| Get the work done | * Investigates and responds to routine problems methodically |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPBPG4XX2 Manage filling and packaging of fermented beverages |  | 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 FBPBPG4XX1 Manage filling and packaging processes |
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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 filling and packaging processes for two different containers from the following list:   * cans * bottles * kegs. | |

| 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:   * bottling and packaging requirements and specifications for product * stages and changes required for equipment operation, specific to product * quality characteristics and uses of end product and output * classifications for beverages * materials preparation requirements and effect of variation on the equipment operation * emergency and troubleshooting procedures, including failure of services * process specification, procedures and operating parameters * 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 * hazards and controls, including manual handling and working with heat and steam * routine maintenance requirements * methods for carbonating fermented beverages with sugar * reasons why fermented beverages need to be away from light and oxygen * temperatures for pasteurisation * methods and reasons for pasteurising fermented beverages * shelf life of pasteurised beverages * labelling, filling and packaging requirements as determined by Australian Taxation Office (ATO) and Food Standards Code * recording keeping for ATO excise requirements, including bright beer register and a packed product register. |

| 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: * stored product to be filled and packaged * filling and packaging equipment * filling and packaging resources and consumables * tools and equipment for adjusting and maintaining equipment * relationships * relevant personnel.   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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