Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0 |

| FBPOPR2016 | Operate a beer maturation process |
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| Application | This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a beer maturation process.  This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a beer maturation process and associated equipment.  All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, food safety, and environmental 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. |
| Prerequisite Unit | FBPOPR2011 Identify key stages and beer production equipment in a brewery |
| Unit Sector | Operational (OPR) |

| 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 work in processing area | 1.1 Confirm maturation requirements according to production requirements  1.2 Confirm clarification requirements, including specifications for any additions and agents  1.3 Confirm materials are available to meet production requirements  1.4 Confirm services as being ready for operation according to workplace procedures and safety and food safety requirements  1.5 Wear appropriate personal protective clothing and ensure correct fit |
| 2. Prepare the maturation process for production | 2.1 Check equipment to confirm readiness for use according to workplace procedures  2.2 Set the maturation process to meet production requirements  2.3 Carry out pre-start checks according to operator instructions |
| 3. Operate and monitor beer maturation equipment | 3.1 Start up, operate, and monitor equipment and control points for variation in operating conditions according to work health and safety and operating procedures  3.2 Confirm system and sub-system outputs meet specification  3.3 Identify, rectify and/or report out-of-specification product, process and equipment performance  3.4 Complete size and product changeovers in accordance with batch instructions  3.5 Record workplace information for the beer maturation process according to workplace procedures |
| 4. Shut down the system | 4.1 Shut down the system safely according to operating procedures  4.2 Clean and maintain equipment to meet the workplace cleaning schedule and procedural requirements  4.3 Collect, treat and dispose of or recycle waste generated by both the process and workplace cleaning procedures  4.4 Record workplace information according to workplace procedures |

| 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 |
| Reading | * Interpret workplace and standard operating procedures relevant to job role * Interpret production requirements |
| Writing | * Record operating, routine maintenance and shutdown information on paper-based and electronic media |
| Numeracy | * Monitor and interpret production and process control indicators and data * Monitor supply and flow of materials to and from the process |
| Navigate the world of work | * Apply workplace procedures to own role and responsibilities * Identify skills, knowledge and experience required for performing own role in the workplace * Ask questions to clarify understanding or seek further information |
| Interact with others | * Communicate and report operational and safety information to relevant personnel * Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures |
| Get the work done | * Access and interpret process control panels and system * Maintain a clean and hazard-free work area * Identify out-of-specification standards and maintain quality specifications * Confirm equipment status and condition * Interpret process and equipment information to monitor process and respond to abnormal performance and variations |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPOPR2016 Operate a beer maturation process | FDFOP2068A Operate a beer maturation process | Updated to meet Standards for Training Packages | 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 FBPOPR2016 Operate a beer maturation process |
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| 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 set up, operated, adjusted and shut down a beer maturation process on at least one occasion, including:   * handling dangerous goods according to required procedures * monitoring control points within the maturation process * confirming equipment status, including: * checking that hygiene and sanitation standards are met * checking all safety guards are in place and equipment is operational * operating equipment and controls to achieve specifications, including: * required temperature * required concentration of finings and other additions * transfers * disposal of sediment and other waste * undertaking corrective action in the event of variation to specification * identifying work health and safety hazards and implementing appropriate action * selecting, fitting and using personal protective clothing and equipment * identifying procedures and responsibilities for reporting and solving problems * following environmental issues and controls * shutting down the process and equipment and implementing cleaning requirements associated with changeovers * using correct waste handling requirements and procedures * recording production and other data according to procedures * cleaning and sanitising equipment according to workplace procedures. | |

| 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:   * purpose and principles of the beer maturation process * relationship between the maturation process, the fermentation process and the filtration process * stages and changes that occur during beer maturation * requirements of maturation * purpose of temperature control and cold storage in the beer maturation process * purpose of protein absorbing agents * purpose of oxygen scavenging agents * purpose of tannin absorbing agents * procedures for vessel transfer * quality characteristics to be achieved * process specifications, procedures and operating parameters * significance and methods of monitoring control points within the maturation process * beer maturation equipment and instrumentation components, purpose and operation * common causes of variation and corrective action required * work health and safety hazards and controls * environmental issues and controls for process, including waste handling requirements and procedures * recording requirements and procedures for the beer maturation process * cleaning and sanitation procedures for a beer maturation process * purpose of finings in a beer maturation process * cask maturation process. |

| Assessment Conditions |
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| 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: * equipment, materials and services necessary to the maturation process * fermentation tank * additions and agents * supply and flow of materials to and from the process * waste sediment disposal * specifications: * access to workplace information to identify production requirements and beer type for beer maturation process * work procedures, including advice on safe work practices, food safety, quality and environmental requirements * product/beer-type changeover processes * reporting and documentation processes and requirements.   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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