Modification history

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

| FBPOPR2061 | Operate a wort production 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 wort production 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 wort production process and associated equipment.  All work must be carried out to comply with workplace procedures, in accordance with State/Territory work 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. |
| 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 Check production requirements against job specifications  1.2 Confirm availability of required materials according to production requirements  1.3 Confirm availability of services according to production requirements  1.4 Wear appropriate personal protective clothing and ensure correct fit |
| 2. Prepare the wort production process for operation | 2.1 Conduct pre-start checks of equipment according to operating procedures  2.2 Identify work health and safety hazards and controls according to operating procedures  2.3 Set the wort production process to meet production requirements |
| 3. Operate and monitor the wort production system | 3.1 Start up the wort production system according to operating procedures  3.2 Monitor control points to confirm performance is maintained within specification  3.3 Undertake required tests according to operating procedures  3.4 Ensure system and sub-system outputs meet specification  3.5 Monitor equipment to confirm operating condition  3.6 Identify, rectify and/or report out-of-specification wort, process and equipment performance  3.7 Record production and other workplace information in the appropriate format |
| 4. Shut down the wort production system | 4.1 Identify the appropriate shut procedure and implement  4.2 Clean and maintain equipment according to workplace procedures  4.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures according to environmental 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 |
| FBPOPR2061 Operate a wort production process | FDFOP2066A Operate a wort production 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 FBPOPR2061 Operate a wort production 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 operated a wort production process on at least one occasion, including:   * accessing workplace information to identify process requirements * confirming availability of materials and services * conducting pre-start checks, including: * inspecting equipment condition to identify any signs of wear * selecting appropriate settings and/or related parameters * cancelling isolation or lock-outs * confirming that equipment is clean and correctly configured for processing requirements * positioning sensors and controls correctly * ensuring any scheduled maintenance has been carried out * confirming that all safety guards are in place and operational * setting up and starting the milling process * setting up and starting the mashing and lautering process * setting up and starting the wort separation process * setting up and starting the wort boiling and cooling process * adding raw materials, including hops and malt * operating a heat exchange procedure * operating a cool wort aeration procedure * transferring fluids and materials between vessels * handling dangerous goods * operating and monitoring equipment associated with wort production * monitoring control points * identifying work health and safety hazards and controls * selecting, fitting and using personal protective clothing and equipment * undertaking shutdowns and changeovers * complying with procedures and responsibilities for reporting problems * complying with environmental procedures and controls * following waste-handling requirements and procedures * recording required production data * cleaning and sanitising equipment according to workplace procedures * maintaining work area to meet housekeeping standards * following relevant work health and safety 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 wort production process * relationship between the wort production process and the fermentation process * stages and changes that occur during wort production * requirements of wort production * purpose of malt, hops, water, adjuncts and the preparation procedure * correct procedures for handling dangerous goods, including dust explosion hazards and control procedures relevant to the wort production process * quality characteristics to be achieved for the wort production process * wort process specifications, procedures and operating parameters * the importance of temperature, temperature control systems and temperature intervals during wort production * purpose of wort production equipment and instrumentation components * significance and methods of monitoring control points within the wort production process * common causes of variation and corrective action required * work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process * environmental issues and controls relevant to the process, including waste/rework collection and handling procedures * cleaning requirements associated with changeovers and types of shutdowns * procedures for reporting problems relevant to the wort production process * cleaning and sanitation procedures for the wort production 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: * personal protective clothing and equipment * wort production equipment * wort production raw materials/ingredients * services as required * stock required for the wort production process * stock flow system * related work areas and communication system * routine preventative maintenance schedule * cleaning schedule * sampling and testing schedules * specifications: * work procedures, including advice on safe work practices, food safety and environmental requirements * production schedule, batch instructions * material safety data sheets * information on specifications, control points and production parameters * documentation and recording requirements and procedures.   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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