Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceuticals Training Package version 2.0 |

| FBPCEL2xx1 | Operate the crossflow filtration process |
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| Application | This unit of competency describes the skills and knowledge required to operate crossflow filtration within wine cellar operations.  The unit applies to individuals who take responsibility for their own work using discretion and judgement in the selection and use of available resources.  No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.  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. |
| Prerequisite Unit | Nil |
| Unit Sector | Cellar Operations (CEL) - Clarification |

| 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 crossflow filtration operations | 1.1 Confirm work instructions and identify potential WHS hazards and controls in accordance with workplace procedures  1.2 Select and use personal protective clothing and equipment relevant to the job role  1.3 Confirm product is available to meet crossflow requirements  1.4 Confirm services are available and ready for operation  1.5 Check equipment and confirm readiness for use according to manufacturer specifications and workplace procedures  1.6 Set the process to meet crossflow requirements |
| 2. Operate and monitor the crossflow filtration | 2.1 Start up the crossflow process safely according to workplace procedures  2.2 Monitor control points to confirm performance is maintained within specification  2.3 Confirm crossflow product meets specification  2.4 Monitor equipment to confirm operating condition  2.5 Identify, rectify and report out-of-specification product, process and equipment performance |
| 3. Shut down the crossflow operation | 3.1 Shut the process down according to workplace procedures  3.2 Dismantle equipment safely and prepare for cleaning  3.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures  3.4 Conduct work in accordance with workplace environmental guidelines  3.5 Record workplace information according to workplace requirements and format |

| 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 textual information to identify key information in workplace procedures, work instructions and manufacturer specifications |
| Writing | * Complete workplace records relating to crossflow process accurately |
| Numeracy | * Interpret symbols and numbers to calibrate equipment, set process parameters and monitor control points in crossflow process |
| Oral communication | * Ask questions to clarify work instructions and use accurate industry terminology to report issues |
| Navigate the world of work | * Recognise and follow workplace procedures and safety requirements associated with own role and area of responsibility * Take responsibility for decisions made to meet process requirements |
| Interact with others | * Follow accepted workplace practices and protocols for communicating information |
| Get the work done | * Organise and assemble resources and conduct multiple tasks to meet crossflow process requirements; monitoring and adjusting processing parameters to achieve production specifications * Recognise risks, hazards and routine problems related to crossflow process and initiate workplace procedures to resolve or report * Use key features and functions and follow routine procedures for using digital technology or systems to record and/or report workplace information * Recognise and act on opportunities for continuous improvement in accordance with workplace practices |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPCEL2xx1 Operate the crossflow filtration process |  | New unit to meet industry requirements. | 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 FBPCEL2xx1 Operate the crossflow filtration process |
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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 demonstrated the crossflow process at least once, including:   * accessing workplace information to identify crossflow requirements * selecting, fitting and using personal protective clothing and equipment * confirming supply of necessary product and services * confirming equipment status and condition * setting up and starting up the crossflow process * monitoring the process and equipment operation to identify out-of-specification results or non-compliance * taking corrective action in response to out-of-specification results or non-compliance * shutting down equipment in routine and emergency situations * preparing equipment for cleaning, and removing waste either manually or by rinsing, in preparation for cleaning and sanitation * conducting work safely following 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 crossflow operation * links between crossflow and related processes * stages and changes which occur during crossflow operation * effect of process stages on end product * quality characteristics and uses of crossflow product * product preparation requirements and effect of variation on the process * main methods used in crossflow process * backwashing * alternating tangential flow * clean-in-place * concentration * dilution * process flow disruption * flow rate calculation * process specifications, procedures and operating parameters * crossflow equipment and instrumentation components, purpose and operation * basic operating principles of process control systems * significance and method of monitoring control points within the process * common causes of variation and corrective action required * shutdown and cleaning requirements associated with changeovers and types of shutdowns * work health and safety hazards and controls * procedures and responsibility for: * reporting problems * environmental issues and controls * waste handling requirements * recording requirements. |

| 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 for crossflow operations * crossflow equipment and materials required for process * cleaning materials, equipment and procedures * documentation or technology for recording and reporting information * specifications: * work instructions and workplace procedures for crossflow process.   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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