Modification history

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

| FBPCEL3005 | Perform rectification (continuous still) operations |
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| Application | This unit of competency describes the skills and knowledge required to operate a rectification process in a wine operations distillation environment. The unit applies to individuals who work in cellar operations and take responsibility for their own work using discretion and judgement in the selection and use of available resources.Legislative requirements relating to distilling alcohol apply to this unit. Users are advised to check current requirements with the Australian Tax Office (ATO), and state / territory liquor licencing and health agencies.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 the rectification process for operation | 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 Identify work health and safety hazards, assess risks and implement control measures1.4 Confirm availability and prepare product and materials to meet production requirements1.5 Confirm that services are available and ready for operation1.6 Check equipment and confirm readiness for use according to manufacturer specifications and workplace procedures1.7 Set the process to meet production requirements |
| 2. Operate and monitor the rectification process | 2.1 Start up the rectification process safely according to workplace procedures2.2 Monitor control points to confirm performance is maintained within specification2.3 Confirm that product and process meet specification2.4 Monitor equipment to confirm operating condition2.5 Identify, rectify and report out-of-specification product, process and equipment performance |
| 3. Shut down the rectification process | 3.1 Shut the process down safely according to workplace procedures3.2 Dismantle equipment safely and prepare for cleaning3.3 Collect, treat and dispose of or recycle waste generated by both the rectification process and cleaning procedures3.4 Conduct work in accordance with workplace environmental guidelines 3.5 Record workplace information according to workplace requirements and format |

| Foundation SkillsThis 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
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| Writing | * Complete workplace records relating to rectification (continuous still) operations accurately
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| Numeracy | * Interpret symbols and numbers to calibrate equipment, set process parameters and monitor control points in rectification (continuous still) operations
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| Oral communication  | * Ask questions to clarify work instructions and use accurate industry terminology to report issues
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| Navigate the world of work | * Recognise and follow workplace procedures, including safety and legislative requirements, associated with own role and area of responsibility
* Take responsibility for decisions made to meet production requirements
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| Interact with others | * Follow accepted workplace practices and protocols for communicating information
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| Get the work done | * Organise and assemble resources and conduct multiple tasks to meet rectification (continuous still) operation requirements, monitoring and adjusting processing parameters to achieve production requirements
* Recognise risks, hazards and routine problems related to rectification operations 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 |
| FBPCEL3005 Perform rectification (continuous still) operations | FDFCEL3005A Perform rectification (continuous still) operations | Updated to meet Standards for Training PackagesMinor changes to elements and performance criteria for clarityRemoval of prerequisites no longer required by industry | 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 FBPCEL3005 Perform rectification (continuous still) 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 demonstrated the entire rectification process at least once, including:* accessing workplace information to identify distillation requirements
* selecting, fitting and using personal protective clothing and equipment
* confirming supply of necessary product, materials and services including checking temperature and alcoholic strength
* preparing product and materials including heating the incoming product
* confirming equipment status and condition
* setting up and starting up the rectification process, including any tests or measurements required to meet Australian Taxation Office (ATO) requirements
* 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
* conducting work safely following work health and safety procedures
* shutting down equipment in routine and emergency situations
* preparing equipment for cleaning including draining and dismantling equipment, and removing waste either manually or by rinsing, in preparation for cleaning and sanitation
* following workplace procedures for:
* reporting and recording corrective action and environmental non-compliance
* recording workplace information
* ensuring adherence to ATO regulations
* sorting, collecting, treating, recycling or disposing of waste.
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| 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 rectification, including definition of the following terms:
* distillation
* continuous columns
* fractionation
* bubble tower
* bubble caps or plates
* sieve trays or plates
* packed column
* types and operation of different columns used for rectification:
* structure and operation
* purpose of each column
* effect of each column on characteristics of end product
* factors affecting distillation column operation as required:
* feed conditions
* reflux conditions
* vapour flow conditions
* foaming
* entrainment
* weeping or dumping
* flooding
* column diameter
* state of trays and packings
* weather conditions
* process requirements for cuts taken from each column as required:
* heads or feints
* tails or fusel oils
* oil of wine
* methanol
* highly rectified spirit (SVR)
* fermentation or preparation of the product to be distilled and any further processing requirements of the distillate
* stages and changes which occur during distillation, including critical temperatures and specific components affected
* effect of process stages on distillate and by-products
* quality characteristics and uses of distillate and by-products
* product and materials preparation requirements and effect of variation on the process
* process specifications, procedures and operating parameters
* equipment and instrumentation components, purpose and operation
* basic operating principles of process control systems where relevant
* 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:
* hazardous properties of ethanol
* emergency flooding procedures
* emergency evacuation procedures
* handling procedures of spirits
* ATO requirements relating to own role and area of responsibility
* relevant state / territory liquor licencing and health authority requirements
* workplace procedures and responsibility for:
* reporting problems
* environmental issues and controls relevant to rectification (continuous still) operations
* recording requirements
* waste handling requirements.
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| 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 rectification (continuous still) operations
* rectification equipment and materials required for operations
* cleaning materials, equipment and procedures
* documentation or technology for recording and reporting information
* specifications:
* work instructions and workplace procedures for rectification (continuous still) operations
* ATO requirements relating to own role and area of responsibility.

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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