Modification history

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

| FBPCEL2018 | Carry out inert gas handling operations |
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| Application | This unit of competency describes the skills and knowledge required to use and handle inert gases in solid or gaseous state including the manufacture of carbon dioxide bricks or snow.  The unit applies to individuals who work under general supervision, with limited autonomy and accountability for their own work.  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) - Fermentation |

| 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. Select gases appropriate to the task | 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 the purpose of gas usage required in work instruction  1.4 Select the appropriate gas or gases to meet requirements  1.5 Determine risk factors based on the characteristics of the gas or gases to be used and handled |
| 2. Prepare and use gases in winery operations | 2.1 Select the appropriate equipment and prepare or set up to meet requirements according to manufacturer specifications  2.2 Operate gas handling equipment according to manufacturer specifications and safe work practices  2.3 Handle gas safely according to specific risk factors  2.4 Manufacture carbon dioxide bricks or snow according to workplace procedures  2.5 Confirm that gas type and quantity delivered meets specification |
| 3. Complete gas handling operations | 3.1 Shut equipment down according to workplace procedures  3.2 Prepare equipment for cleaning following safe work practices  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 procedures 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, and work and operator instructions |
| Writing | * Complete workplace records relating to inert gas handling operations accurately |
| Numeracy | * Interpret symbols and numbers relating to pressure and flow to calibrate equipment, cylinders and/or service lines; set process parameters, and monitor control points * Calculate quantities of inert gas to meet work instructions |
| Oral communication | * Ask questions to clarify work instructions and use accurate terminology to report issues |
| Navigate the world of work | * Recognise and follow workplace requirements associated with own role and area of responsibility |
| Interact with others | * Follow accepted workplace practices and protocols for communicating information |
| Get the work done | * Follow clearly defined instructions to identify and assemble resources and sequence tasks to carry out inert gas handling operations * Monitor processes and control points, identify risk and routine problems related to gas handling tasks and initiate standard 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 |
| FBPCEL2018 Carry out inert gas handling  operations | FDFCEL2018A Carry out inert gas handling operations | Updated to meet Standards for Training Packages  Minor changes to elements and performance criteria for clarity | 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 FBPCEL2018 Carry out inert gas handling 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 carried out inert gas handling operations on at least two separate occasions, including:   * accessing workplace information to identify inert gas handling requirements * selecting, fitting and using personal protective clothing and equipment * selecting appropriate gases to meet requirements: * single or blend of gases * gaseous or solid form * dosage * interpreting cylinder or service line information * confirming supply of services and gases for requirements * selecting equipment appropriate to the task and gas to be handled * setting up, preparing and operating equipment according to workplace procedures or manufacturer instructions * manufacturing carbon dioxide bricks or snow * delivering gas according to specifications * monitoring gas handling process: * gas pressure * gas flow * integrity of seals * taking corrective action in response to out-of-specification results or non-compliance * shutting down equipment in routine and emergency situations * 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 using inert gases in cellar operations * properties and functions of gases * hazards and risks associated with different forms or types of gas * gas handling policy and procedures * factors affecting choice of gas or gas blends: * wine type and style * winemaker preference * equipment set up, preparation and operation procedures and requirements including settings and key variables * purpose of personal protective clothing and equipment * regulatory requirements as they affect immediate gas handling responsibilities * steps in manufacturing process for dry ice bricks or snow * requirements to liaise or advise related work areas * routine maintenance requirements * routine shutdown sequence and emergency shutdown procedures * work health and safety requirements * workplace procedures and responsibility for: * reporting problems * 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 inert gas handling operations * equipment, cylinders and materials for inert gas handling operations * gas or gases to meet work instruction * cleaning materials, equipment and procedures * documentation or technology for recording and reporting information * specifications: * work instructions and workplace procedures for inert gas handling operations.   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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