Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 5.0 |

| FBPOIL3XX9 | Clean and mill olives |
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| Application | This unit of competency describes the skills and knowledge required to operate and monitor de-leafing, washing and hammer milling equipment to crush olives, ready for further processing including the production of olive oil  This unit applies to individuals who work in an olive oil processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a hammer mill and associated olive cleaning 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 | Nil |
| Unit Sector | Edible oils (OIL) |

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| Elements | Performance Criteria |
| 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 olives are available to meet production requirements  1.2 Evaluate olive condition and confirm olive washing and de-leafing requirements  1.3 Weigh olives and record details on production run sheet  1.4 Confirm de-leafing, washing and milling equipment is clean according to health, safety and food safety requirements  1.5 Wear appropriate personal protective clothing and ensure correct fit  1.6 Carry out pre-start checks according to safe operating procedures |
| 2. Prepare and operate washing and de-leafing equipment | 2.1 Check wash water is clean (potable) and supply is ready for operation  2.2 Enter processing and operating parameters to meet washing and de-leafing requirements  2.3 Load olives into hopper in preparation for cleaning  2.4 Start, operate and monitor the olive cleaning process  2.5 Keep work area clean of blown leaves to avoid hazards |
| 3. Operate and monitor milling | 3.1 Inspect the condition of the mill hammers to ensure they are fit for purpose  3.2 Conduct start-up checks of hammer mill according to safe operation procedures  3.3 Enter processing parameters including setting grid size to achieve optimal outcomes  3.4 Start, operate and monitor the hammer milling process according to workplace procedures  3.5 Add citrus to olive feed for agrumato method oils, or fresh herbs and spices for other co-processed olive oil products  3.6 Inspect olive paste to ensure specifications are met  3.7 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements  3.8 Shut down the process according to safe work procedures  3.9 Maintain records of washing and milling according to workplace procedures |
| 4. Conduct housekeeping and identify maintenance requirements | 4.1 Follow and apply workplace housekeeping and environmental procedures  4.2 Identify and report any maintenance requirements according to workplace procedures |

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| 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. | |
| Skill | Description |
| Reading | * Interpret workplace and standard operating procedures relevant to work task * Interpret production requirements |
| Writing | * Record processing data for batch using digital and/or paper-based formats |
| Numeracy | * Monitor and interpret production and process control indicators and data * Monitor supply and flow of raw materials to and crushed product from the mill * Recognise capacity of storage tanks (L, hL) and weights of raw product (kg, T), energy consumption units (amps) * Set grid size for crushing |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPOIL3XX9 Clean and mill olives | No applicable | New unit | No equivalent unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4 |

| TITLE | Assessment requirements for FBPOIL3XX9 Clean and mill olives |
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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 operated and monitored a hammer mill and associated cleaning equipment to de-leaf, clean and to crush at least one batch of olives to specification, including:   * applying safe work procedures * following food safety procedures * taking corrective action in response to typical faults and inconsistencies in washing and crushing. | |

| 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 basic principles of the process, including stages and changes that occur during de-leafing, washing and milling * Australian Standards for Olive Oil and Olive Pomace Oils (AS5264-2011) * Australian Olive Industry Code of Practice * basic operating principles of equipment for the de-leafing, washing equipment and hammer mill, including: * safety hazards associated with washing and milling equipment * main equipment components * status and purpose of guards * equipment operating capacities and applications * the purpose and location of sensors and related feedback instrumentation * services required for de-leafing, washing and milling equipment used in the workplace * the flow of the de-leafing, washing and milling process and the effect of product output on downstream processes * methods to evaluate and determine olive condition prior to crushing * circumstances where olives may not require washing * quality characteristics and uses of crushed olives * agrumato method and other co-processed oils and their characteristics * methods used to monitor the washing and milling of olives, including inspecting, measuring and testing in-feed and out-feed solids, and other tests as required by the process * good manufacturing practices (GMP) relevant to work task * inspection or test points (control points) in the process and the related procedures and recording requirements, including use of refractometers * health and safety hazards and controls, including limitations of hearing and protective clothing and equipment relevant to the work process * operating requirements and parameters and corrective action required where operation is outside specified operating parameters * typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems * contamination/cross contamination, spoilage and other food safety risks associated with milling olives, and related control measures * awareness of common microbiological, physical, chemical and allergen hazards related to milling olives, including the types of hazards likely to occur, the conditions under which they occur, possible consequences, and control methods to prevent occurrence * standard microbiological techniques to identify food poisoning and spoilage organisms * the importance of plant hygiene and how it can affect the finished product * microbiological toxins and aflatoxins * requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage * isolation, lock-out and tag-out procedures and responsibilities required for operating the washing and milling process * cleaning and sanitation procedures required for operating the washing, and milling equipment * environmental issues and controls relevant to the operation of the washing and milling process, including handling and safe disposal of waste * recording procedures to ensure traceability of product. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * an oil processing workplace or an environment that accurately represents workplace conditions * resources, equipment and materials: * personal protective clothing and equipment * washing and milling equipment and related services * olives to be crushed * cleaning materials and equipment * specifications: * work procedures, including advice on safe work practices, food safety, quality and environmental requirements * information on equipment capacity and operating parameters * production schedule and batch specifications, control points and processing parameters * 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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