Modification history

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

| FBPFAV3001 | Conduct chemical wash for fresh produce |
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| Application | This unit of competency describes the skills and knowledge required to implement a wash process for fresh produce where chemicals, including chlorine, are used to achieve quality standards.  This unit applies to individuals who set and monitor levels of cleaning chemicals while conducting wash operations in a food processing production environment. It typically applies to produce that includes leafy greens and fruit, where chemicals are used to ensure required cleaning outcomes.  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 | Fruit and Vegetables (FAV) |

| 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. Confirm required use of chemicals | 1.1 Identify chemicals used for the washing of fresh produce and confirm required levels  1.2 Identify hazards and risks associated with using chemicals and implement control measures throughout operations  1.3 Prepare and use personal protective equipment according to workplace safety procedures  1.4 Identify and apply storage and handling requirements for chemicals |
| 2. Prepare for washing operation | 2.1 Confirm and prepare raw materials for washing according to production specifications  2.2 Confirm equipment for operational readiness, and fit and adjust components and related attachments  2.3 Carry out pre-start checks according to operator instructions  2.4 Measure chemicals and add dose according to specifications  2.5 Check performance of chemical-dosing equipment to confirm accuracy  2.6 Check water quality and confirm for use |
| 3. Operate and monitor the washing process | 3.1 Start and operate the washing process according to operating instructions and work health and safety requirements  3.2 Inspect and wash raw materials to meet workplace specifications  3.3 Check water to confirm correct levels of chemicals  3.4 Transfer washed materials for further processing or packaging  3.5 Identify variation in equipment operation and report maintenance requirements  3.6 Identify, rectify or report out-of-specification product or process outcomes  3.7 Maintain the work area according to workplace procedures, food safety and work health and safety requirements  3.8 Maintain workplace records in required format |
| 4. Shut down the washing process | 4.1 Implement the appropriate shutdown procedure  4.2 Handle, store and dispose of chemicals according to workplace procedures and environmental regulations  4.3 Identify and report maintenance requirements according to workplace 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 | * Read and interpret standard operating procedures and directions for the safe operation of equipment when operating the chemical wash process |
| Writing | * Record maintenance requirements on paper-based and electronic media * Record equipment failure on paper-based and electronic media |
| Oral Communication | * Actively listen to clarify types of produce required for wash process |
| Numeracy | * Monitor correct ratios of chemicals to amount of water in the wash process |
| Navigate the world of work | * Apply workplace procedures to own role and responsibilities, and seek clarification or other assistance when required * Maintain hygiene standards and hazard-free work area * Identify and describe own skills, knowledge and experience within context of job role |
| Interact with others | * Use appropriate vocabulary, including technical language directly relevant to role * Report chemical wash processing performance to relevant personnel using required communication method |
| Get the work done | * Monitor and maintain quality specifications when operating the chemical wash process * Identify routine problems and implement standard solutions according to workplace guidelines |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPFAV3001 Conduct chemical wash for fresh produce | FDFFV3001A Conduct chemical wash for fresh produce | 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 FBPFAV3001 Conduct chemical wash for fresh produce |
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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, on at least one occasion:   * conducted pre-start checks on machinery used for washing fresh produce * handled and applied chemicals according to specifications * started, operated, monitored and adjusted process equipment to achieve required quality outcomes when washing fresh produce * conducted water and chemical level checks * taken corrective action in response to typical faults and inconsistencies * completed workplace records in required format * safely shut down equipment * applied work health and food 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 basic principles of the washing process, including the importance of water quality and the role of chemicals in the washing process * basic operating principles of equipment, including: * 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 the chemical wash process and action to take if services are not available * the flow of this process and the effect of outputs on downstream processes * quality characteristics to be achieved by the washing, including the consequences of out-of-specification moisture levels on further processing and final product * quality requirements of raw materials and effect of variation on process performance, including how variation in microbial load can affect the washing process * implications of incorrect chemical levels on fresh produce * operating requirements, 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 * early warning signs of potential problems * methods used to monitor the washing process, including inspecting, measuring and testing as required by the process * inspection or test points (control points) in the process and the related procedures, and recording requirements * contamination and food safety risks associated with the process and related control measures * common causes of variation and corrective action required * workplace health and safety hazards and controls * requirements of different shutdowns as appropriate to the process and workplace production requirements, including: * emergency and routine shutdowns * procedures to follow in the event of a power outage * isolation, lock out and tag out procedures and responsibilities * product or process changeover procedures and responsibilities * procedures and responsibility for reporting production and performance information * environmental issues and controls relevant to the process, including waste/rework collection and handling procedures * basic operating principles of process control, including the relationship between control panels and systems and the physical equipment * sampling and testing associated with process monitoring and control * routine maintenance procedures for washing equipment * cleaning and sanitation procedures for washing equipment. |

| 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 * washing equipment and services, including water and chemicals * raw materials to be processed * 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 instructions * specifications and inspection or control points * sampling schedules and test procedures and equipment * documentation and recording requirements and procedures * cleaning procedures, materials and equipment * relationships: * interactions with team members and supervisors.   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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