Modification History

|  |  |
| --- | --- |
| Release | Comments |
| Release 1 | This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0 |

| FBPGRA3012 | Implement a rice hulling and separation process |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to remove the husks and separate brown rice from paddy rice using hulling and separation equipment.The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice hulling and separation process. They work under minimal supervision and take responsibility for their own work and that of others in their team.All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation 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 | Grain processing (GRA) |

| Elements | Performance criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare for safe work in a hulling and separation process | 1.1 Select and fit personal safety protection equipment according to workplace safety procedures1.2 Select and fit hygiene protection equipment according to workplace food safety hygiene procedures1.3 Perform personal hygiene cleaning procedures1.4 Receive and interpret instructions on hulling and separation activity and performance requirements |
| 2. Prepare hulling and separation equipment for operation | 2.1 Ensure raw materials are available to meet operating requirements2.2 Identify and confirm the status of cleaning and maintenance requirements2.3 Fit and adjust machine components and related attachments according to operating requirements2.4 Enter processing/operating parameters to meet safety and production specifications2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance2.6 Conduct pre-start checks according to workplace instructions |
| 3. Operate and monitor hulling and separation process | 3.1 Start up and operate process according to workplace procedures3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures3.4 Implement required safety procedures3.5 Collect samples and test to ensure rice meets specification3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification3.7 Ensure workplace meets housekeeping standards3.8 Maintain records according to workplace instructions |
| 4. Shut down hulling and separation process | 4.1 Identify appropriate shutdown procedure4.2 Shut down the process safely according to workplace procedures4.3 Identify maintenance requirements, and report according to workplace procedures |

|  |
| --- |
| 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. |
| Skills | Description |
| Reading | * Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
 |
| Writing | * Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
 |
| Numeracy | * Interprets and manipulates numerical information for volumes, weights and measures
* Performs mathematical calculations to check, interpret and confirm results of system tests
 |
| Oral communication | * Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
 |
| Navigate the world of work | * Takes full responsibility for following policies, procedures and industry standards
* Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
 |
| Interact with others | * Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
 |
| Get the work done | * Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes
* Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations
* Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking
* Uses the main features and functions of digital tools to complete work tasks and access information
 |

|  |
| --- |
| Unit mapping information |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPGRA3012 Implement a rice hulling and separation process | ZRGRPHS2A Operate a hulling and separation process | Updated to meet Standards for Training PackagesChange of coding to reflect revised AQF levelChanges to title, elements and performance criteria  | No equivalent unit |

|  |  |
| --- | --- |
| 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 FBPGRA3012 Implement a rice hulling and separation process |
| --- | --- |
| Performance evidence |
| An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has implemented a hulling and separation process for at least three rice grain varieties, including: * accessed and interpreted workplace information for hulling and separation requirements
* confirmed supply of necessary materials and services
* conducted pre-start checks, started, operated, monitored and adjusted separation and hulling process equipment to achieve required outcomes, including:
* monitored control points
* conducted inspections
* confirmed process remains within specification
* conducted equipment changeover/replacements according to procedures
* diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
* selected, fitted and used personal protective equipment
* followed workplace health and safety procedures
* followed personal hygiene practices according to food safety procedures
* monitored the quality of process, and taken corrective action in response to out-of-specification results
* completed workplace records according to procedures
* maintained work area to meet housekeeping standards.
 |

| Knowledge evidence |
| --- |
| 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 hulling and separation process and the effect of hulling/shelling and separation process on the end product, including:
* visual identification of short, medium and long grain rice varieties used within the organisation
* process flow and the effect of hulling and separation process on the end product
* basic operating principles of equipment, including:
* huller rollers and replacement/reversal
* elevators
* spouts
* tilt paddy tables
* operational understanding and adjustments of main equipment components, including:
* status and purpose of guards
* equipment operating capacities, efficiencies and applications
* purpose and location of sensors and related feedback instrumentation
* knowledge of services required and action to take if services are not available
* basic operating principles of process control, including:
* process control equipment
* the relationship between control panels and systems
* product/process changeover procedures and responsibilities
* quality characteristics, including:
* requirements of materials and effect of variation in raw materials on the hulling and separation process
* common causes of variation, and corrective action required, including contamination and mixed rice
* sampling and testing associated with process monitoring and control
* quality indicators, including moisture
* equipment operating requirements, parameters and corrective action required where operation is outside specified operating parameters, including:
* identification of typical equipment faults and related causes
* recognition of signs and symptoms of blocked, faulty or worn equipment
* early warning signs of potential problems
* requirements of different shutdowns, 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
* routine maintenance procedures
* methods used to monitor the hulling and separation process, including:
* inspecting
* measuring
* testing
* contamination/food safety risks associated with the process, and related control measures
* cleaning and sanitation procedures
* work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
* procedures and responsibility for reporting production and performance information
* environmental issues and controls relevant to the process, including:
* waste/rework collection
* manual handling procedures related to the process.
 |

| Assessment conditions |
| --- |
| Assessment of skills must take place under the following conditions:* physical conditions:
* an industrial rice processing plant or an environment that accurately represents workplace conditions
* resources, equipment and materials:
* personal protective clothing and equipment
* hulling equipment and services
* tilt paddy tables for separating grain from paddy
* product to be hulled and separated
* 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
* specifications, control points and processing parameters
* equipment operating instructions and manuals
* sampling schedules and test procedures and equipment
* documentation and recording requirements and procedures
* cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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