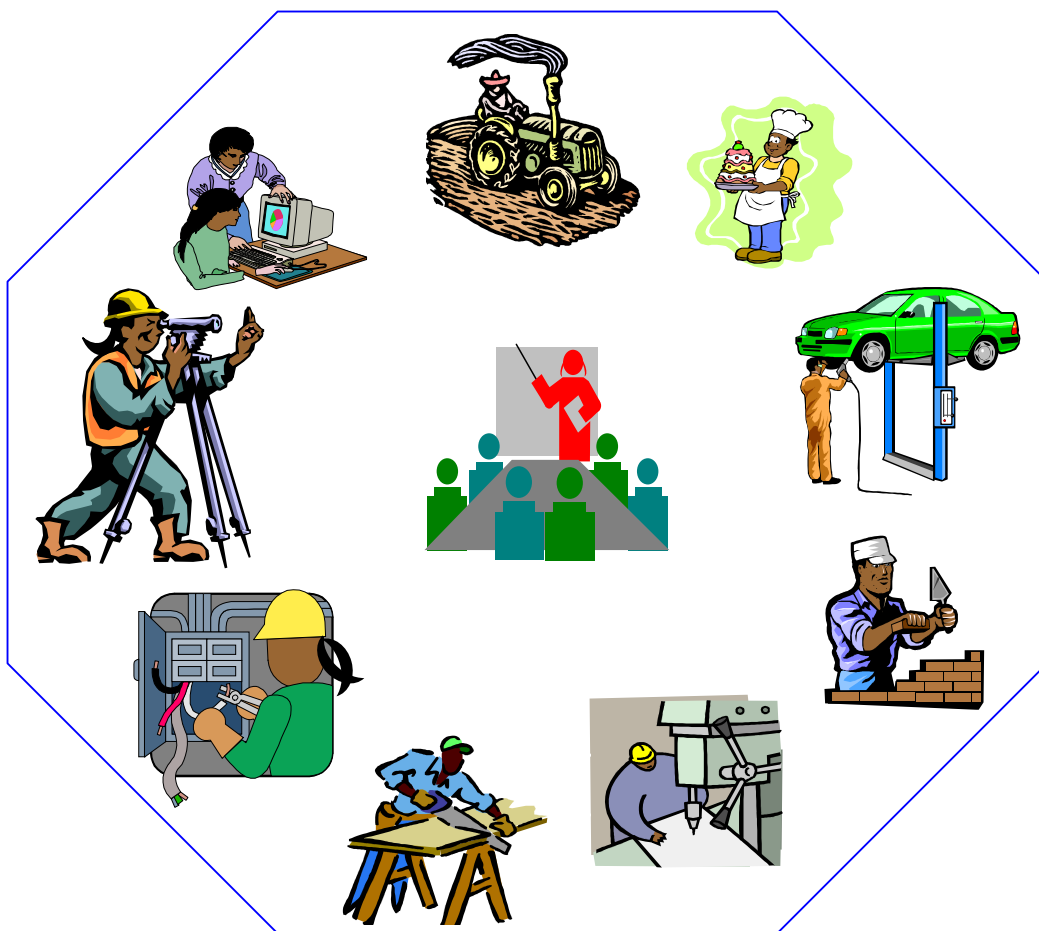




Federal Democratic Republic of Ethiopia
OCCUPATIONAL STANDARD
PROCESSING HONEY AND BEESWAX
NTQF Level II



*Ministry of Education
July 2013*

Introduction

Ethiopia has embarked on a process of reforming its TVET-System. Within the policies and strategies of the Ethiopian Government, technology transformation – by using international standards and international best practices as the basis, and, adopting, adapting and verifying them in the Ethiopian context – is a pivotal element. TVET is given an important role with regard to technology transfer. The new paradigm in the outcome-based TVET system is the orientation at the current and anticipated future demand of the economy and the labor market.

The Ethiopian Occupational Standards (EOS) are - a core element of the Ethiopian National TVET-Strategy and an important factor within the context of the National TVET-Qualification Framework (NTQF). They are national Ethiopian standards, which define the occupational requirements and expected outcome related to a specific occupation without taking TVET delivery into account.

This document details the mandatory format, sequencing, wording and layout for the Ethiopian Occupational Standard comprised of Units of Competence.

A Unit of Competence describes a distinct work activity. It is documented in a standard format that comprises:

- Occupational title, NTQF level
- Unit code
- Unit title
- Unit descriptor
- Elements and Performance criteria
- Variables and Range statement
- Evidence guide

Together all the parts of a Unit of Competence guide the assessor in determining whether the candidate is competent.

The ensuing sections of this EOS document comprise a description of the respective occupation with all the key components of a Unit of Competence:

- the chart with an overview of all Units of Competence for the respective occupation (Unit of Competence Chart) including the Unit Codes and the Unit of Competence titles
- the contents of each Unit of Competence – this includes further directions on the contents and format of the unit of competence
- occupational map providing the Technical and Vocational Education and Training (TVET) providers with information and important requirements to consider when designing training programs for this standards, and for the individual, a career path

UNIT OF COMPETENCE CHART

Occupational Standard: Processing Honey and Beeswax

Occupational Code: IND PHB

NTQF Level II

<p>IND PHB2 01 0613 Operate a Pure Honey and Bees Wax Manufacture Process</p>	<p>IND PHB2 02 0613 Operate a Process Control Interface</p>	<p>IND PHB2 03 0613 Implement Sampling Procedures</p>
<p>IND PHB2 04 0613 Conduct Routine Maintenance</p>	<p>IND PHB2 05 0613 Clean Equipment in Place</p>	<p>IND PHB2 06 0613 Clean and Sanitize Equipment</p>
<p>IND PHB2 07 0613 Implement Quality Systems and Procedures</p>	<p>IND PHB2 08 0613 Operate a Form, Fill and Seal Process</p>	<p>IND PHB2 9 0613 Implement Food Safety Program and Procedure</p>
<p>IND PHB2 10 0613 Follow Work Procedures to Maintain Food Safety</p>	<p>IND PHB2 11 0613 Operate an Extraction Process</p>	<p>IND PHB2 12 0613 Implement Good Manufacturing Practice Procedures</p>
<p>IND PHB2 13 0613 Operate Manual Bottling and Packaging Processes</p>	<p>IND PHB2 14 0613 Operate the Labeling Process</p>	<p>IND PHB2 15 0613 Participate in Workplace Communication</p>
<p>IND PHB2 16 0613 Work in Team Environment</p>	<p>IND PHB2 17 0613 Develop Business Practice</p>	<p>IND PHB2 18 0613 Standardize and Sustain 3S</p>

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Operate a Pure Honey and Beeswax Manufacture Process
Unit Code	IND PHB2 01 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, monitor, and adjust a process to produce pure honey and beeswax.

Elements	Performance Criteria
1. Prepare the equipment and process for operation	<p>1.1 Liquid and seed honey is confirmed and made available to meet production requirements.</p> <p>1.2 Pure beeswax is confirmed and available to meet production requirements.</p> <p>1.3 Cleaning and maintenance legislative requirements and status are identified and confirmed.</p> <p>1.4 Machine components and related attachments are fitted and adjusted to meet operating requirements.</p> <p>1.5 Processing/operating parameters are set to meet safety and production requirements.</p> <p>1.6 Equipment performance is checked and adjusted as required.</p> <p>1.7 Pre-start checks are carried out as required by workplace requirements.</p>
2. Operate and monitor the creamed honey and pure beeswax manufacture process	<p>2.1 The process is started and operated according to workplace procedures.</p> <p>2.2 Equipment is monitored to identify variation in operating conditions.</p> <p>2.3 Variation in equipment operation service is identified and maintenance requirements are reported according to workplace reporting requirements.</p> <p>2.4 The process is monitored to confirm that specifications are met.</p> <p>2.5 Out-of-specification production process outcomes are identified, rectified and/or reported to maintain the process within specification.</p> <p>2.6 The work area is maintained according to housekeeping standards.</p> <p>2.7 Work is conducted in accordance with workplace environmental guidelines.</p> <p>2.8 Workplace information records are maintained according to workplace recording requirements.</p>

3. Shut down the creamed honey and pure beeswax manufacture process	<p>3.1 The appropriate shutdown <i>police and procedure</i> are identified.</p> <p>3.2 The process is shut down according to workplace procedures.</p> <p>3.3 Maintenance requirements are identified and reported according to workplace reporting requirements.</p>
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Variable	Range
Legislative requirements	May includes: <ul style="list-style-type: none"> • The Food Standards Code, including labelling, weights and measures legislation • Legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity
Equipment	may include: <ul style="list-style-type: none"> • jacketed tanks/vats • buffer tanks • mixers/homogenisers • scraped surface heat exchangers • agitators and pumps • Filler material with nozzle, volume, speed and precision • Bottle and caps sorter • Capping material • Air consumption regulator • Labelling material
Services	May include: <ul style="list-style-type: none"> • power • water • compressed and instrumentation air
Production processes	May include: <ul style="list-style-type: none"> • addition of seed honey and beeswax • holding • mixing/working • temperature control
Workplace information	may include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications/recipes • production schedules and instructions • manufacturers' advice • standard forms and reports
Policies and procedures	May include: <ul style="list-style-type: none"> • Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements

Operation of equipment and processes	<p>may include:</p> <ul style="list-style-type: none"> the use of process control panels and systems
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Evidence Guide	
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Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> confirm machine frames are stainless steel/food grade, good looking and easy to clean conduct pre-start checks on machines used for creamed honey & pure beeswax start, operate, monitor and adjust process equipment to achieve required quality outcomes take corrective action in response to typical faults and inconsistencies complete workplace records as required apply safe work practices and identify OHS hazards and controls safely shut down equipment & apply food safety procedures
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> basic principles of crystallisation, methods used to reduce crystal size, the effects of temperature and agitation on crystal formation, appropriate ratio of seed to liquid honey and factors that influence the crystallisation process including moisture content and crystal size Physical characteristics, composition and physiological effects of wax basic operating principles of main equipment components with status, purpose, applications, operating capacities, location of sensors and related feedback instrumentation services required and action to take if services are not available quality and organoleptic characteristics of different types of honey and beeswax processed quality characteristics to be achieved by the final product and related test methods used to confirm quality quality requirements of honey and beeswax used and the effect of variation on the final products operating requirements, parameters and corrective action required where the process is outside specified operating parameters (typical operating parameters include ambient and processing temperatures, agitation speeds and holding times and temperatures) typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems methods used to monitor each stage of the production process, such as inspecting, measuring and testing as required

	<ul style="list-style-type: none"> • inspection or test points (control points) in the process and the related procedures and recording requirements • contamination/food safety risks associated with the process and related control measures (this relates specifically to air inclusion and moisture content and related methods of control) • common causes of variation and corrective action required • factors that affect the stability and shelf-life of the finished product and options to extend shelf-life, including storage conditions for packed product • hazards and controls, including the limitations of protective clothing and equipment relevant to the work process • 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 • procedures and responsibility for reporting production and performance information • environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process • basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment • product/process changeover procedures and responsibilities where relevant • sampling and testing associated with process monitoring and control where relevant • routine maintenance procedures where relevant • cleaning and sanitation procedures where relevant 		
Underpinning Skills	<ul style="list-style-type: none"> • access workplace information to identify processing requirements • select, fit and use personal protective clothing and/or equipment • confirm supply of necessary materials and services, including selecting appropriate honey and beeswax (it may also require selection of more than one kind to meet required product characteristics) • conduct pre-start checks, such as inspecting equipment condition to identify any signs of wear, selecting appropriate settings and/or related parameters (temperature and agitation settings), cancelling isolation or lock outs as required, confirming that equipment is clean and correctly configured for processing requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming that all safety guards are in place and operational 		
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	<ul style="list-style-type: none"> • start, operate, monitor and adjust process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification • monitor supply and flow of materials to and from the process • take corrective action in response to out-of-specification results • respond to and/or report equipment failure within level of responsibility • locate emergency stop functions on equipment • follow isolation and lock out/tag out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility • complete workplace records as required • maintain work area to meet housekeeping standards • use process control systems according to enterprise procedures • demonstrate batch/product changeovers according to enterprise procedures • collect samples and conduct tests according to enterprise procedures • conduct routine maintenance according to enterprise procedures • clean and sanitise equipment according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Operate a Process Control Interface
Unit Code	IND PHB2 02 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to operate a computer-based interface to modify and/or interrogate a control system.

Elements	Performance Criteria
1. Navigate the process control interface	1.1 The readiness of the control interface and related components for operation are confirmed. 1.2 Hardware provided is used to operate the interface. 1.3 Page links are used to move between screens. 1.4 Messages and alarms are acknowledged. 1.5 Required information is accessed from screen displays. 1.6 Interface system malfunctions are recorded and reported in accordance with workplace information procedures.
2. Use interface system to operate and maintain a process within required parameters	2.1 Individual items of equipment and/or processes are started, monitored and shutdown using the computer based interface . 2.2 Equipment is selected, status altered and settings entered to meet operating requirements. 2.3 Sequences are activated to initiate process operation. 2.4 Equipment giving a bad signal or bad measurements is recognized and responsive action taken.
3. Analyze data to predict and control performance	3.1 Trends are selected and analyzed to identify performance patterns. 3.2 Causes of abnormal or unacceptable performance are identified and corrective action taken. 3.3 Information is recorded as required.

Variable	Range
Information accessed	may include: <ul style="list-style-type: none"> • graphics, trends • parameter settings • alarms • individual plant item status
Workplace information	may include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • manufacturers' specifications
Computer-based interface	may consist of: <ul style="list-style-type: none"> • specific product processing related softwares

	<ul style="list-style-type: none"> • computer processor • monitor • keyboards • track ball • mouse • storage devices • printers(It is linked to the process control system)
Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • Work is carried out in accordance with company policies and procedures, manufacturers' recommendations, legislative requirements, codes of practice and industrial awards and agreements

Evidence Guide	
Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • operate and navigate interface to access, retrieve, enter and store work data • start, operate, monitor and shut down process equipment • control and adjust equipment using control interface to achieve production requirements • recognise faults and inconsistencies and take corrective action • complete workplace records as required • Apply safe work practices and identify OHS hazards and controls.
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • processes and equipment being controlled, including required processing sequences • operating principles of process control and interface system, including the relationship between control panels, systems and the physical equipment, and where relevant understanding of the operating conditions required for accurate information input from sensors and related instrumentation • action required to respond to error messages and alarms • typical faults that can occur when operating a process control interface and corrective action required • performance data collected by the control interface system and its application to troubleshoot performance, including the ability to identify and investigate related trend data to track cause and effect • recording requirements and responsibilities
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • use all hardware components to operate the control interface • navigate the system to locate and use information required, including moving between screens and locating relevant performance data

	<ul style="list-style-type: none"> • operate the control system using the interface, including start up and shut down equipment components and change set points as required • locate sensors and instrumentation providing input signals to the control system and confirm operating order within level of responsibility • recognise and respond to error messages and alarms as required • access relevant performance data using the control system, including locating and interpreting performance trend information • record log information using the interface system according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Implement Sampling Procedures
Unit Code	IND PHB2 03 0613
Unit Descriptor	This is an Optional unit. It covers the skills and knowledge required to understand the requirements of sampling plans, and to collect and transfer samples to retain sample integrity. Operators requiring this competency would typically be required to follow specific sampling procedures such as aseptic sampling

Elements	Performance Criteria
1. Prepare for sampling	<p>1.1 Sampling requirements are identified in accordance with the sampling plan.</p> <p>1.2 Sampling equipment, containers and labels are prepared.</p>
2. Collect samples	<p>2.1 Samples are collected according to sampling procedures and the requirements of the sampling plan.</p> <p>2.2 Samples technique are handled and prepared to preserve sample and source integrity.</p> <p>2.3 Defects or abnormalities in source material and/or sample are identified and reported.</p> <p>2.4 Sample information is recorded according to workplace information sample recording requirements.</p> <p>2.5 The workplace meets housekeeping standards.</p>

Variable	Range
Sampling requirements	<p>May include:</p> <ul style="list-style-type: none"> • sampling under standard conditions • sampling after processes are adjusted in response to variation or non-conformance
Sampling	<p>May Include:</p> <ul style="list-style-type: none"> • number of points • using a range of techniques
Sampling techniques	<p>May include:</p> <ul style="list-style-type: none"> • sub-sampling
Maintenance of sample information	<p>May be achieved by</p> <ul style="list-style-type: none"> • use of appropriate personal protective clothing, • clean sampling tools and containers (sterilized tools/containers for aseptic sampling), • temperature control and addition of preservatives as required
Workplace information	<p>may include:</p> <ul style="list-style-type: none"> • Standard Operating • Procedures (SOPs) • specifications

	<ul style="list-style-type: none"> • production schedules and instructions, • manufacturers' advice and sampling plans
Work	<p>May Include:</p> <ul style="list-style-type: none"> • company policies and procedures • regulatory and licensing requirements • legislative requirements and • industrial awards and agreements

Evidence Guide	
Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • Access and interpret sampling plan to identify sampling requirements • Select, fit and use personal protective clothing and/or equipment • Prepare for sampling to ensure required tools, containers and labels are available • Follow sampling procedures and the sampling plan to collect samples from the point/s, in the quantities and at the times specified • Identify atypical source materials and/or samples and take corrective action. This may involve reporting abnormalities, repeating sample collection and/or following intensive sampling schedules as required • Complete sample records according to workplace requirements. This may include labeling samples as required • Transfer samples for testing • Maintain work area to meet housekeeping standards
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Basic sampling principles. This includes an understanding of the importance of following the sampling plan to obtain representative sampling reflecting characteristics of source material; the sample characteristics and related preservation, handling and storage requirements; and the labeling system purpose and requirements • Tests to be conducted on samples and related handling and preparation requirements and responsibilities • Characteristics of materials sampled and common contaminants and related conditions under which contamination is likely to occur • Sampling techniques relevant to samples collected. This may include an understanding of sterilization methods and procedures • The relationship between sampling, testing and production processes. This includes an understanding of different sampling regimes that may apply in response to non-standard conditions or after corrective action is taken to adjust production outputs

	<ul style="list-style-type: none"> • Procedures and responsibility for reporting and recording sampling information. This may include legislative requirements • Procedures for preparing samples
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • use all sampling procedures to operate all the required sampling • Access and apply workplace information on the requirements for sampling procedures • Identify products for sampling • Identify and correct variation within boundaries of work role. This may require the use of quality data • Determine when and how to make adjustments to maintain output within specified parameters • Identify and respond to out-of-specification or unacceptable inputs and/or outputs due to faulty sampling • Record quality data in required format • Collect samples as required by sampling regime where applicable
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Conduct Routine Maintenance
Unit Code	IND PHB2 04 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to inspect equipment and carry out routine maintenance and/or adjustment using a limited range of hand tools.

Elements	Performance Criteria
1. Conduct routine inspection of plant and equipment	1.1 Equipment is inspected to identify signs of wear. 1.2 Nature of maintenance requirement is assessed.
2. Prepare to conduct routine maintenance	2.1 Maintenance task is assessed to determine tools and services required. 2.2 Equipment is prepared for maintenance. 2.3 Hand tools are selected according to task requirements. 2.4 Tools are checked before use and unsafe and/or faulty items are reported within standard procedures. 2.5 Maintenance is planned and scheduled in consultation with affected work areas to minimize disruption to production.
3. Carry out routine maintenance	3.1 Routine maintenance on equipment is carried out according to workplace procedures. 3.2 Maintenance activities are reported according to workplace information reporting requirements.
4. Complete maintenance tasks	4.1 Inspections equipment is returned to operating order. 4.2 Tools and materials are stored according to workplace procedure. 4.3 Relevant personnel are notified of maintenance completion. 4.4 Housekeeping standards are maintained. 4.5 Work is conducted in accordance with workplace environmental guidelines.

Variable	Range
Typical routine maintenance tasks	may include: <ul style="list-style-type: none"> • replacement of consumable components, such as O-rings, hoses, filters and other 'bolt-on/bolt-off' equipment parts • lubrication of equipment and maintenance of fluid levels • simple adjustment, alignment or attachment of equipment components, parts, guides and sensors • clearing blocked nozzles, such as glue nozzles • positioning/attaching equipment components • carrying out basic maintenance on video inkjet machines

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Routine maintenance	<p>May include:</p> <ul style="list-style-type: none"> • Routine maintenance is carried out according to company policies and procedures, licensing requirements, legislative requirements and industrial awards and agreements
Workplace information	<p>may include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production log books • routine maintenance schedules • manufacturers' advice • condition monitoring information
Inspections of equipment	<p>may be carried out:</p> <ul style="list-style-type: none"> • informally or as part of a structured program associated with proactive maintenance
Tools and materials	<p>may include:</p> <ul style="list-style-type: none"> • a limited range of hand tools, such as spanners and screwdrivers, grease guns, Allen keys and measuring and alignment equipment • lubricants and consumables for video inkjet printers

Evidence Guide	
Critical aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify routine maintenance tasks for machine or equipment • monitor operation and identify need for maintenance tasks schedule maintenance tasks and communicate requirements with affected personnel • select and use appropriate hand tools to undertake routine maintenance • assess readiness for returning machine or equipment to operation or referring for further attention complete maintenance documentation • Apply safe work practices and identify OHS hazards and controls.
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • system in place to manage maintenance of plant and equipment in the workplace, including programs, such as responsive, preventative and proactive maintenance as appropriate • responsibilities for participating in the maintenance program, including scope of operator responsibilities, roles of others involved in plant and equipment maintenance and procedures for raising maintenance orders where requirements are outside operator role • basic operating principles of equipment to be maintained • signs and symptoms of faulty equipment and early warning signs of potential problems

	<ul style="list-style-type: none"> • basic checks used to confirm the nature of maintenance requirements, including distinguishing between mechanical and electrical faults and identifying probable causes or conditions that may increase maintenance requirements of equipment used • procedures for issuing, maintaining and storing tools used • safe use of hand tools and measuring instrumentation relevant to maintenance responsibilities • lubrication requirements, including requirements to use food grade lubricants as required and consequences of using incorrect type or amount of lubricants • safe work procedures, including appropriate signage of maintenance activities as required, use of appropriate personal protective clothing and equipment, and awareness of safety hazards and controls relating to maintenance tasks • methods used to render equipment safe to work on or clean including lock out/tag out and isolation procedures (in some cases this may involve liaising with other maintenance operators) • procedures and inspections to be carried out to confirm that equipment is in operating order and all parts are accounted for food safety risks arising from poor personal hygiene, cleaning and housekeeping practices and procedures associated with routine maintenance • maintenance planning, scheduling and recording procedures
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information such as the equipment history, faults or difficulties • select, fit and use personal protective clothing and/or equipment • inspect equipment for signs of wear, such as visual inspections to detect leaks, listening for unusual noises and/or vibrations • identify and describe maintenance requirements, including the ability to assess the urgency of the maintenance issue, recognise common types of maintenance requirements and run basic checks according to workplace procedures to confirm the need for and type of maintenance support required • take action to address maintenance requirements, such as carrying out routine maintenance within level of skill and responsibility and/or reporting outstanding maintenance to appropriate personnel using the required forms or request system • plan and schedule maintenance within level of responsibility, such as consulting affected personnel and/or work areas on timing and notifying of maintenance progress

	<ul style="list-style-type: none"> • prepare equipment and work area for routine maintenance, including cleaning equipment prior to carrying out maintenance and confirming that equipment is safe to work on, and simple isolation or tag out of equipment as required by workplace procedure • select and use hand tools as required to carry out maintenance task • select relevant parts and materials as required to carry out maintenance task • carry out routine maintenance tasks according to workplace procedures • on completion of maintenance tasks, return equipment to operational order, including confirming that all equipment parts, nuts and bolts are accounted for and correctly tightened, and where required, cleaning and sanitising equipment • store tools in designated location, including basic tool maintenance, such as oiling • complete records of maintenance as required • maintain work area to meet housekeeping standards • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Clean Equipment in Place
Unit Code	IND PHB2 05 0513
Unit Descriptor	This unit of competency covers the skills and knowledge required to prepare process equipment for Cleaning In Place (CIP) or in-line

Elements	Performance Criteria
1. Prepare for cleaning	<p>1.1 Chemical stocks are available to meet cleaning and sanitation requirements.</p> <p>1.2 Services are confirmed as available and ready for operation.</p> <p>1.3 Equipment shutdown is planned and equipment is taken off-line for cleaning.</p> <p>1.4 Equipment and related valves and pipe work are configured to confirm readiness for cleaning.</p> <p>1.5 The plant is set for the cleaning cycle.</p>
2. Operate and monitor the cleaning process	<p>2.1 The cleaning cycle is undertaken according to company policies and procedures.</p> <p>2.2 The cleaning process is monitored to confirm cleaning meets company requirements.</p> <p>2.3 Cleaning data is recorded according to workplace information reporting requirements.</p> <p>2.4 Out-of-specification process and equipment performance is identified, rectified and/or reported.</p>
3. Dispose of waste and return plant to operating condition	<p>3.1 Cleaning chemicals are flushed from plant and disposed of according to company policies and procedures.</p> <p>3.2 Work is conducted according to environmental requirements.</p> <p>3.3 Plant is set up to meet operational requirements.</p>

Variable	Range
Dosing of cleaning chemicals	<p>may be:</p> <ul style="list-style-type: none"> automatically controlled or manually dosed
Services	<p>may include:</p> <ul style="list-style-type: none"> power water, steam, compressed and instrumentation air
Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> Work is carried out in accordance with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements. When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply and reference to food safety is replaced by GMP

Workplace information	<p>may include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production cleaning schedules and instructions • signs and symbols • Materials Safety Data Sheets (MSDS) • manufacturers' advice • standard forms and reports
Operation and monitoring of equipment and processes	<p>May include:</p> <ul style="list-style-type: none"> • Operation and monitoring of equipment and processes typically requires the use of control panels and systems
Testing	<p>may include:</p> <ul style="list-style-type: none"> • Where tests are conducted as part of operation, a typical requirement is measurement of pH
Monitoring the process	<p>May include:</p> <ul style="list-style-type: none"> • chemical strength • cycle time • temperatures • time • storage tank levels and condensate quality

Evidence Guide

Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • shut down equipment and prepare for cleaning • prepare and use chemicals according to safe work requirements • clean equipment to meet work standards • monitor cleaning and report or address any non-compliances • flush equipment and dispose of waste according to environmental guidelines • complete required documentation • apply safe work practices and identify OHS hazards and controls apply food safety procedures.
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • purpose and basic principles of CIP, including the use and functions of caustic and acid solutions, and cleaning sequence and stages as required in the workplace • purpose and use of cleaning equipment and chemicals used • terminology relating to the chemical solutions used • safe work procedures, including appropriate signage of cleaning activities and safe handling and storage of cleaners and sanitisers used • purpose and limitations of protective clothing and equipment • cleaning and sanitation requirements, including different levels of cleaning requirements depending on the reason for cleaning

	<ul style="list-style-type: none"> • characteristics of cleaning and sanitising chemicals used, including basic composition as well as compatibility of chemicals with types of equipment • methods used to render equipment safe to clean, including the status and purpose of equipment guards, relevant lock out/tagout and isolation procedures • equipment settings required for cleaning and for operating respectively • basic operating principles of process control where relevant, including the relationship between control panels and systems and the physical equipment • inspection points for cleaning and sanitation • consequences of contamination of process flows by cleaning solutions and related safeguards • types of waste generated by both the production and the cleaning process and related collection, treatment and disposal requirements • environmental consequences of incorrect cleaning waste disposal procedures • requirements to liaise/advise related work areas • reporting and recording systems • routine maintenance procedures where relevant • sampling methods and test procedures where relevant 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information, such as the cleaning schedule to identify cleaning requirements • select, fit and use personal protective clothing and/or equipment • confirm supply of necessary materials and services • handle and prepare cleaning and sanitation agents safely, including following correct handling and preparation procedures and use of appropriate protective clothing and equipment as required • schedule cleaning and/or liaise with related work areas to take equipment and area off-line with minimal disruption to production • prepare equipment and area for cleaning, such as rendering equipment safe to clean, removing obstacles and unnecessary equipment, correctly positioning equipment (e.g. valves, pipes, vents and taps), selecting appropriate cleaning cycle, removing waste and/or dismantling equipment • clean equipment according to cleaning process cycle and procedures, such as starting up and operating the CIP process in both automatic and manual modes • monitor the process and equipment operation to maintain the cleaning process within the required parameters • locate emergency stop functions on equipment 		
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	<ul style="list-style-type: none"> • return plant to operating order • return area to working order • take corrective action in response to out-of-specification results • advise affected work areas of cleaning schedule and progress • maintain and store chemicals and related equipment as required • carry out relevant checks and inspections to confirm effectiveness of cleaning • sort, collect, treat, recycle or dispose of waste • record cleaning information • maintain work area to meet housekeeping standards • conduct routine maintenance according to enterprise procedures • take samples and conduct tests according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Clean and Sanitize Equipment
Unit Code	IND PHB2 06 0513
Unit Descriptor	This unit of competency covers cleaning, sanitation and related procedures for food processing production equipment

Elements	Performance Criteria
1. Prepare for cleaning	1.1 Cleaning /sanitizing agents and services are available and ready for use. 1.2 Equipment is cleared of product and/or packaging consumables in preparation for cleaning. 1.3 Equipment is rendered safe to clean.
2. Clean and sanitize equipment to meet workplace requirements	2.1 Equipment is cleaned and sanitized according to workplace procedure and requirements. 2.2 Equipment is inspected to confirm operating condition and cleanliness. 2.3 Unacceptable equipment condition is identified and reported according to workplace procedures . 2.4 Cleaning equipment and chemicals are stored according to workplace procedure. 2.5 Waste from cleaning process is disposed of according to workplace procedures. 2.6 Work is conducted in accordance with workplace environmental guidelines. 2.7 Equipment is restored to operating order.

Variable	Range
Inspecting cleaning effectiveness	involves: <ul style="list-style-type: none"> • carrying out a visual inspection
Cleaning and sanitising chemicals	may include: <ul style="list-style-type: none"> • pre-mixed or manually mixed
Workplace information	may include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production and cleaning schedules • labels and codes • safety signs and symbols • Materials Safety Data Sheets (MSDS) • standard forms • written or verbal instruction

Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • Work is carried out in accordance with company procedures, licensing requirements, legislative requirements, and industrial awards and agreements. When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply and reference to food safety is replaced by GMP
Preparing/restoring equipment to operating order	<p>may involve:</p> <ul style="list-style-type: none"> • simple dismantling and reassembling of equipment parts • basic isolation • covering of motors and instrumentation
Services	<p>may include:</p> <ul style="list-style-type: none"> • power • water • steam • compressed and instrumentation air

Evidence Guide

Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • prepare equipment for cleaning • prepare and use chemicals according to safe work requirements • clean and sanitise equipment to meet work standards • monitor cleaning and report or address any non-compliances • dispose of waste according to environmental guidelines • complete required documentation • apply safe work practices and identify OHS hazards and controls • Apply food safety procedures.
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • the purpose of cleaning and sanitation and importance in maintaining food safety • functions of cleaners, sanitisers and related equipment • safe work procedures, including appropriate signage of cleaning activities, safe handling and storage of cleaners and sanitisers used, safety when using cleaning methods, such as hot water and steam hoses, and status and purpose of safety guards • purpose and limitations of protective clothing and equipment • cleaning and sanitation requirements relating to work responsibilities, including the need for different levels of cleaning where relevant • procedures for preparing cleaners and sanitizers as required • cleaning method/s to be followed relating to work responsibilities • other work areas/operators who need to be consulted/advised on timing of cleaning

	<ul style="list-style-type: none"> • methods used to render equipment safe to clean, including understanding the status and purpose of equipment guards, relevant lock out/tag out and isolation procedures and related equipment settings for both cleaning and operating as required • procedures for conducting cleaning and sanitising • types of waste generated by the cleaning process and related collection, treatment and disposal requirements • potential environmental impact of incorrect waste handling • inspection, cleaning and storage requirements of cleaning equipment used • inspection points and methods for confirming the effectiveness of cleaning and sanitation, including visual inspection, and where required, recording of cleaning conducted • inspection requirements to confirm equipment condition, including acceptable equipment condition, ability to identify faulty or unacceptable equipment and take required corrective action • recording requirements and responsibilities • routine maintenance procedures where relevant • sampling methods and test procedures where relevant 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information, such as the cleaning schedule to identify cleaning requirements • select, fit and use personal protective clothing and/or equipment • confirm supply of necessary cleaning and sanitising equipment and services • select and prepare cleaners and sanitisers as required according to workplace procedures • prepare equipment for cleaning, such as rendering equipment safe to clean, clearing product and waste materials, covering motors and instrumentation where steam or water hoses are used, and simple dismantling of equipment parts • advise any affected work areas/operators of cleaning progress to coordinate timely completion with minimal disruption to production • clean and sanitise equipment as required according to workplace procedures and cleaning schedule • return equipment to operating order (this may involve basic assembly of equipment parts) • inspect equipment to identify equipment condition and cleanliness • locate emergency stop functions on equipment • report and/or correct unacceptable equipment condition • maintain housekeeping standards 		
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	<ul style="list-style-type: none"> • prepare cleaners and sanitisers as required • store cleaners, sanitisers and related equipment as required • carry out relevant checks and inspections • maintain work area to meet housekeeping standards • conduct routine maintenance according to enterprise procedures • take samples and conduct tests according to enterprise procedures • record cleaning and sanitation information according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Implement Quality Systems and Procedures
Unit Code	IND PHB2 08 0513
Unit Descriptor	<p>This is a Core unit. It covers the skills and knowledge required to apply quality principles and system requirements when carrying out work responsibilities where work involves the operation of packaging and/or processing equipment.</p> <p>Note that this unit does not apply to the pharmaceutical industry. Refer to FDFPHGMP2B Implement Good Manufacturing Practice procedure.</p>

Elements	Performance Criteria
1. Monitor quality of work outcome	<p>1.1 Quality requirements are identified.</p> <p>1.2 Inputs are inspected to confirm capability to meet quality requirements.</p> <p>1.3 Work is conducted to produce required outcomes.</p> <p>1.4 Work processes are monitored to confirm quality of output and/or service.</p> <p>1.5 Processes are adjusted to maintain outputs within specification.</p> <p>1.6 The cleaning cycle is undertaken according to company policies and procedures.</p>
2. Participate in maintaining and improving quality at work	<p>2.1 Work area, materials, processes and product are routinely monitoring to ensure compliance with quality requirements.</p> <p>2.2 Non-conformance in inputs, process, product and/or service is identified and reported according to workplace reporting requirements.</p> <p>2.3 Corrective action is taken within level of responsibility, to maintain quality standards.</p> <p>2.4 Quality issues are raised with designated personnel.</p>

Variable	Range
Police and procedure	Work is carried out in accordance with company policies and procedures, licensing and regulatory requirements, legislative requirements and industrial awards and agreements
Monitoring quality	Observation and other checks, tests or inspections to confirm that the work output meets defined specifications or quality standards. This can include the use of data collection and analysis tools such as control charts. Tests or inspections may be carried out by the operator, a third party or be automated
Reporting and recording systems	<p>may be verbal, written,</p> <ul style="list-style-type: none"> • electronic or screen-based

Workplace information	<p>may include</p> <ul style="list-style-type: none"> Standard Operating Procedures (SOPs), quality specifications, food safety plans, log sheets, standard forms and reports
Control points	<p>May include:</p> <ul style="list-style-type: none"> refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical) as well as quality and regulatory control points
Participating in improvement	<p>may involve</p> <ul style="list-style-type: none"> participation in structured improvement programs, one-off projects and day-to-day problem solving

Evidence Guide

Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> apply quality principles and system requirements when carrying out work Responsibilities where work involves the operation of packaging and/or processing equipment. implement quality systems and procedures Access workplace information to identify and apply quality principles and system requirements Select, fit and use personal protective clothing and/or equipment Confirm supply of necessary quality systems and procedures, components /consumables, materials and services Conduct pre-start checks. This may involve inspecting equipment condition to identify any signs of wear; setting coders and printers; selecting appropriate equipment settings and/or related parameters; cancelling isolation or lockouts as required; and confirming that equipment is clean and correctly configured for implementing quality systems and procedures requirements, sensors and controls are correctly positioned, any scheduled maintenance has been completed, and that all safety guards are in place and operational Start, operate, monitor and adjust quality systems and procedures equipment to achieve required outcomes. This may include loading quality systems and procedures components/consumables and/or product, and monitoring control points such as weights, codes, placement, glue temperatures, alignment and appearance, configuration and seal integrity as required to confirm process remains within specification Monitor supply and flow of materials to and from the process Take corrective action in response to out-of-specification results
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	<ul style="list-style-type: none"> • Respond to and/or report equipment failure within level of responsibility • Locate emergency stop functions on equipment • Follow isolation and lock out/tag out procedures as required to take quality systems and procedures equipment off-line in preparation for cleaning and/or maintenance within level of responsibility • Demonstrate batch/process changeovers • Complete workplace records as required • Use process control systems • Integrity testing of implementing quality systems and procedures • Carry out routine maintenance • Clean and sanitize equipment 		
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Quality policy, procedures and responsibilities • Quality system used in the workplace. This includes an understanding of the relationship between the quality system and food safety program, sources of information on quality requirements, the role of internal and external auditors as appropriate and performance improvement processes • Basic concepts of quality assurance including hazards, risk assessment and control methods • Requirements of internal and external customers • Control points for own work. This includes an understanding of the purpose of the control point, the risk if not controlled and the method of control used • Monitoring, testing and inspection procedures relating to process control requirements • Scope to correct/control variation within equipment and process capacity parameters • Evidence of out-of-standard or unacceptable performance • Procedures for responding to out-of-specification or unacceptable performance/outcomes. This includes procedures for identifying or isolating materials or product of unacceptable quality • Systems used to trace product ingredients as relevant to own work • Requirements to report and record quality information • Sampling and test methods and procedures 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Identify control points or inspection points for own work and related methods used to monitor quality • Maintain quality of own work. This may require carrying out relevant checks and inspections in order to monitor control points and check and inspect equipment, materials, product, packaging consumables, processing conditions and service standards relevant to own work 		
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	<ul style="list-style-type: none"> • Identify and correct variation within boundaries of work role. This may require the use of quality data • Determine when and how to make adjustments to maintain output within specified parameters • Identify and respond to out-of-specification or unacceptable inputs and/or outputs • Record quality data in required format • Conduct tests related to work responsibilities • Collect samples as required by sampling regime where applicable
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Operate a Form, Fill and Seal Process
Unit Code	IND PHB2 09 0513
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate, adjust and shut down a form, fill and seal process.

Elements	Performance Criteria
1. Prepare the forming, filling and sealing equipment and process for operation	<p>1.1 Materials and packaging components/consumables are confirmed and available to meet operating requirements.</p> <p>1.2 Cleaning and maintenance requirements and status are identified and confirmed.</p> <p>1.3 Machine components and related attachments are fitted and adjusted to meet operating requirements.</p> <p>1.4 Operating parameters are entered as required to meet safety and production requirements.</p> <p>1.5 Equipment performance is checked and adjusted as required.</p> <p>1.6 Pre-start checks are carried out as required by workplace requirements.</p> <p>1.7 The cleaning cycle is undertaken according to company policies and procedures.</p>
2. Operate and monitor the forming, filling and sealing process	<p>2.1 The process is started and operated according to workplace procedures.</p> <p>2.2 Equipment is monitored to identify variation in operating conditions.</p> <p>2.3 Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements.</p> <p>2.4 Packaging quality and seal integrity are monitored to confirm that specifications are met.</p> <p>2.5 Out-of-specification outcomes are identified, rectified and/or reported to maintain the process within specification.</p> <p>2.6 The work area is maintained according to housekeeping standards.</p> <p>2.7 Work is conducted in accordance with workplace environmental guidelines.</p> <p>2.8 Workplace records are maintained according to workplace recording requirements.</p>

3. Shut down the forming, filling and sealing process	<p>3.1 The appropriate shutdown procedure is identified.</p> <p>3.2 The process is shut down according to workplace procedures.</p> <p>3.3 Maintenance requirements are identified and reported.</p>
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Variable	Range
Packaging	may include: <ul style="list-style-type: none"> • vacuum packing • Modified Atmosphere Packaging (MAP)
Operation of equipment and processes	may require: <ul style="list-style-type: none"> • the use of process control panels and systems
Workplace information	may include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules and instructions • manufacturers' advice • standard forms and reports
Policies and procedures	May include: Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Requirements	May includes: <ul style="list-style-type: none"> • the Food Standards Code, including labelling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity • When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply in place of the Australian Food Standards Code and reference to food safety is replaced by GMP
Typical containers formed by this process	May include: <ul style="list-style-type: none"> • cartons • pouches • boxes • bags • Where bottles are formed as part of this process, also refer to PMBPROD211B Operate blow moulding equipment and PMBPROD270B Operate injection blow moulding equipment
Forming, filling and sealing equipment	may include: <ul style="list-style-type: none"> • pumps • gable top fillers • film fillers • hermetic sealers • bulk bag fillers • aseptic packaging

	<ul style="list-style-type: none"> • aseptic plastic pouches • aseptic carton systems • aseptic form, fill and seal equipment • aseptic bottle fillers/cappers • bag-in-box filler • bag forming and filling machines
Services	<p>May include:</p> <ul style="list-style-type: none"> • power • steam • water • vacuum • inert gas (where gas flushing is used) • compressed and instrumentation air

Evidence Guide	
Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • conduct pre-start checks on machinery used for forming, filling and sealing • start, operate, monitor and adjust process equipment to achieve required quality outcomes • take corrective action in response to typical faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • apply food safety procedures
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • purpose and basic principles of forming, filling and sealing, including the purpose and characteristics required of packaging materials used, and the methods used to form packaging, fill and seal product (where methods involve vacuum or map packaging, it includes an understanding of the effect of modified atmosphere on product shelf-life) • product and packaging coding requirements and related legal requirements, including product weight • basic operating principles of forming, filling and sealing equipment, such as main equipment components, status and purpose of guards, equipment operating capacities and applications, the purpose and location of sensors and related feedback instrumentation, and services required for operation of form, fill and seal equipment used in the workplace • the flow of processes supplying the forming, filling and sealing process and the effect of process output on downstream processes

	<ul style="list-style-type: none"> • quality characteristics and requirements of forming, filling and sealing, such as quality requirements of product and packaging components/consumables, requirements of packaging forming stage, filling, including fill levels and weights, and requirements of seal formation and integrity, and integrity testing procedures, where required • methods used to monitor the process, such as 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 • operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including restart procedures following a crash or jam up • typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems • common causes of variation and corrective action required, including the effect of variation in both product characteristics and packaging components/consumables on forming, filling and sealing performance • food safety hazards and risks associated with forming, filling and sealing and related control measures • hazards and controls • 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 • product/packaging changeover procedures • procedures and responsibility for reporting production and performance information • environmental issues and controls relevant to the forming, filling and sealing process, including waste/rework collection and handling procedures related to the process • basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment • aseptic container preparation/forming, filling and sealing requirements where relevant • sampling and testing procedures where relevant • cleaning and sanitation procedures where relevant 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information to identify processing requirements • select, fit and use personal protective clothing and/or equipment 		
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	<ul style="list-style-type: none"> • confirm supply of necessary packaging components/consumables and product • conduct pre-start checks, such as inspecting equipment condition to identify any signs of wear, selecting appropriate settings and/or related parameters, cancelling isolation or lockouts as required, confirming that equipment is clean and correctly configured for packaging requirements, loading packaging components/consumables, positioning sensors and controls correctly, ensuring any scheduled maintenance has been completed, and confirming that all safety guards are in place and operational • start, operate, monitor and adjust the forming, filling and sealing process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, such as: <ul style="list-style-type: none"> ➤ formation of container/packaging ➤ flow rates ➤ product weights and volumes ➤ fill levels ➤ temperature, including product and sealing temperatures ➤ supply of packaging components/consumables ➤ packaging quality and seal integrity, such as testing packaging integrity • monitor supply and flow of materials to and from the process • take corrective action in response to out-of-specification results • respond to and/or report equipment failure within level of responsibility • locate emergency stop functions on equipment • follow isolation and lock out/tag out procedures as required to take forming, filling and sealing process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility • prepare forming, filling and sealing equipment for cleaning • demonstrate product/process changeovers • complete workplace records as required • maintain work area to meet housekeeping standards • use process control systems according to enterprise procedures • demonstrate aseptic container preparation/forming, filling and sealing according to enterprise procedures • collect samples and conduct tests according to enterprise procedures • clean and sanitise equipment according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including
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	<p>questioning, active listening, asking for clarification and seeking advice from supervisor</p> <ul style="list-style-type: none"> • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Implement Food Safety Program and Procedure
Unit Code	IND PHB2 10 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required maintaining personal hygiene and conduct food handling, housekeeping and waste disposal related to work tasks and responsibilities where work involves operation of production and/or packaging equipment and processes.

Elements	Performance Criteria
1. Implement the food safety program	<p>1.1 Food handling requirements are identified.</p> <p>1.2 Food handling is carried out according to the food safety program.</p> <p>1.3 Food safety hazards are controlled as required by the food safety program.</p> <p>1.4 Where food safety control requirements are not met, the incident is promptly reported and corrective action is taken.</p> <p>1.5 Food safety information is recorded to meet requirements of the food safety program.</p> <p>1.6 The workplace is maintained in a clean and tidy order to meet workplace standards.</p> <p>1.7 Work is conducted in accordance with workplace environmental guidelines.</p>
2. Participate in maintaining and improving food safety	<p>2.1 Work area, materials, equipment and product are routinely monitoring to ensure compliance with food safety requirements.</p> <p>2.2 Processes, practices or conditions which could result in a food safety breach are identified and reported according to workplace reporting requirements.</p> <p>2.3 Corrective action is taken in accordance with the food safety program.</p> <p>2.4 Food safety issues are raised with designated personnel.</p>
3. Comply with personal hygiene standards	<p>3.1 Personal hygiene meets the requirements of the food safety program.</p> <p>3.2 Health conditions and/or illness are reported as required by the food safety program.</p> <p>3.3 Clothing and footwear worn are made appropriate for the food handling task and meets the requirements of the food safety program.</p> <p>3.4 Movement around the workplace is complied with the food safety program.</p>

Variable	Range
Food handling	May include: <ul style="list-style-type: none"> • food receipt and storage • food preparation • cooking, holding, cooling, chilling and reheating • packaging, disposal
A food safety program	May include how a business will control all food safety hazards that may be reasonably expected to occur in all food handling operations of the food business. The food safety program and related procedures must comply with legal requirements of the food safety standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures
Food safety hazard	May include a biological, chemical or physical agent in, or condition of, food that has the potential to cause an adverse health effect
Requirements	May include the food safety program. At a minimum this must meet legal requirements as set out in Food Safety Standard 3.2.2, Division 4:13 and/or state or territory legislation/regulations
Products/materials handled and stored	can include: <ul style="list-style-type: none"> • raw materials • ingredients • consumables • part-processed product • finished product • cleaning materials
Responsibility for monitoring food safety	May include identifying breaches in food safety procedures and taking corrective action relates to own tasks and responsibilities and occurs in the context of the food safety program in the workplace
Workplace information	may be provided in: <ul style="list-style-type: none"> • food safety program • Standard Operating Procedures (SOPs) • specifications • log sheets • written or verbal instruction
A food safety program	may be: <ul style="list-style-type: none"> • Is reasonably expected to occur in all food handling operations of the food business. The food safety program and related procedures must comply with legal requirements of the food safety standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures

Hygiene requirements	<p>May include:</p> <ul style="list-style-type: none"> • By the food safety program. At a minimum this must meet legal requirements as set out in the Food Safety Standard 3.2.2, Division 4:14 and/or state or territory legislation/regulations
Appropriate clothing and footwear	<p>It should be designed to ensure that the body and clothing itself does not contaminate food or surfaces likely to come into contact with food. Examples of clothing designed to prevent contamination by the body include:</p> <ul style="list-style-type: none"> • purpose designed overalls or uniforms • hair-nets • beard snoods • gloves and overshoes
Examples of a breach of food safety procedures	<p>could include:</p> <ul style="list-style-type: none"> • failure to check delivery temperatures of potentially hazardous chilled food • failure to place temperature-sensitive food in temperature controlled storage conditions promptly • failure to wash hands when required • use of cloths for unsuitable purposes
Monitoring	<p>May include:</p> <ul style="list-style-type: none"> • taking temperatures • collecting samples • conducting visual inspections • conducting other tests as required

Evidence Guide

Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify own responsibilities with regard to food safety • identify food safety risks in the workplace and the control measures used to manage them • apply control measures in own work • monitor compliance with food safety standards • identify and act on non-compliances and participate in improving safety • maintain required standards of personal hygiene • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • Apply food safety procedures.
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • sources of information and expertise on procedures and responsibilities for food safety relating to own work • basic concepts of HACCP-based food safety, including identification of hazards that are likely to occur, establishing appropriate methods of control and confirming that controls are met

	<ul style="list-style-type: none"> • food safety management arrangements in the workplace, including awareness of food safety legislation, workplace policies and procedures to implement responsibilities, understanding the relationship between the quality system and food safety program, personnel responsible for developing and implementing the food safety program, the role of internal and external auditors as appropriate, procedures followed to investigate contamination events, and performance improvement processes • awareness of common microbiological, physical and chemical hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences and control methods to prevent occurrence • basic understanding of the properties, handling and storage requirements of ingredients, materials and products handled and used • suitable standard for materials, measuring devices, equipment and utensils used in the work area • food safety requirements related to work responsibilities, including personal hygiene, requirements and procedures to report illness and safe food handling practices for own work • methods used to monitor that food safety is under control, including the purpose of sampling and taking measurements, such as temperature and pH, and conducting inspections and tests • action required in the event of non-compliance (corrective action is typically described in the food safety program and/or related workplace information) • purpose of keeping records and the recording requirements of the food safety program • methods used in the workplace to isolate or quarantine food which may be unsafe • product and ingredient traceability procedures, such as product recall where required by work responsibilities • clothing and footwear requirements for working in and/or moving between food handling areas • personal clothing maintenance, laundering and storage requirements • appropriate bandages and dressings to be used when undertaking food handling • housekeeping requirements and responsibilities relating to own work, and use and storage of housekeeping/cleaning equipment where relevant • procedures to follow in the event of pest sighting or discovery of infestation • purpose and importance of cleaning and sanitation procedures
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	<ul style="list-style-type: none"> • waste collection, recycling and handling procedures relevant to own work responsibilities • cleaning and sanitation procedures where relevant • impact of rework handling/addition on food safety where relevant • sampling and test methods where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • access workplace information to identify food safety program and procedure requirements • select, fit and use personal protective clothing and/or equipment • confirm supply of necessary food safety program and procedure components/consumables and product • conduct pre-start checks, such as inspecting equipment conditions for food safety program and procedure requirements, loading packaging components/consumables • start, operate, monitor and implement food safety program and procedure • monitor supply and flow of materials to and from the process • demonstrate product/process changeovers • complete workplace records as required • maintain work area to meet housekeeping standards • use process control systems according to enterprise procedures • collect samples and conduct tests according to food safety program and procedures • clean and sanitise equipment according to food safety program and procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Follow Work Procedures to Maintain Food Safety
Unit Code	IND PHB2 11 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to maintain food safety when carrying out work tasks. Basic food safety practices include personal hygiene and conduct, food handling, housekeeping and waste disposal related to work tasks and responsibilities where work involves routine manual processes and/or operation of simple automated equipment.

Elements	Performance Criteria
1. Handle food safely	<p>1.1 Food handling requirements are identified.</p> <p>1.2 Food handling is carried out according to the food safety program.</p> <p>1.3 The workplace is maintained in a clean and tidy order to meet workplace standards.</p> <p>1.4 Work is conducted in accordance with workplace environmental guidelines.</p>
2. Identify, control and report food safety hazards	<p>2.1 Work area, materials, equipment and product are routinely monitor to ensure compliance with food safety requirements.</p> <p>2.2 Processes, practices or conditions which are not consistent with the food safety program are identified and corrective action is taken within the level of responsibility.</p>
3. Comply with personal hygiene standards	<p>3.1 Personal hygiene meets the requirements of the food safety procedure.</p> <p>3.2 Health conditions and/or illness reported as required by the food safety program.</p> <p>3.3 Clothing and footwear worn are made appropriate for the food handling task and meets the requirements of the food safety program.</p> <p>3.4 Movement around the workplace complies with the food safety program.</p>

Variable	Range
Food handling	<p>refers to:</p> <ul style="list-style-type: none"> • food receipt and storage • food preparation, cooking, holding, cooling, chilling and reheating • packaging • disposal

Food safety program	<p>may be:</p> <ul style="list-style-type: none"> Reasonably expected to occur in all food handling operations of the food business. The food safety program and related procedures must comply with legal requirements of the food safety standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures
Food safety hazard	<p>May include:</p> <ul style="list-style-type: none"> a biological, chemical or physical agent in, or condition of, food that has the potential to cause an adverse health effect
Products/materials handled and stored	<p>can include:</p> <ul style="list-style-type: none"> raw materials ingredients consumables part-processed product finished product cleaning materials
Responsibility for monitoring food safety	<p>May include:</p> <ul style="list-style-type: none"> identifying breaches in food safety procedures and taking corrective action relates to own tasks and responsibilities and occurs in the context of the food safety program in the workplace
Personal hygiene requirements	<p>May include:</p> <ul style="list-style-type: none"> Are specified by the food safety program. At a minimum this must meet legal requirements as set out in the Food Safety Standard 3.2.2, Division 4:14 and/or state or territory legislation/regulations
Reporting of health conditions and illness requirements	<p>May include:</p> <ul style="list-style-type: none"> Are specified by the food safety program. At a minimum this must meet legal requirements as set out in Food Safety Standard 3.2.2, Division 4:13 and/or state or territory legislation/regulations
Breach of food safety procedures	<p>could include:</p> <ul style="list-style-type: none"> failure to check delivery temperatures of potentially hazardous chilled food failure to place temperature-sensitive food in temperature controlled storage conditions promptly failure to wash hands when required use of cloths for unsuitable purposes
Food safety information	<p>may be provided in:</p> <ul style="list-style-type: none"> food safety program Standard Operating Procedures (SOPs) specifications log sheets written or verbal instruction

Appropriate clothing and footwear	<p>Clothing designed to prevent contamination by the body include:</p> <ul style="list-style-type: none"> • purpose designed overalls or uniforms • hair-nets • beard snoods • gloves and overshoes
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Evidence Guide	
Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • identify food safety handling requirements in the workplace • apply and monitor own compliance with food safety standards • maintain required standards of personal hygiene • maintain clean and tidy work area • report non-compliances • apply safe work practices and identify OHS hazards and controls
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • food safety requirements related to work responsibilities, including personal hygiene, requirements and procedures to report illness and safe food handling practices for own work, as well as an awareness of the possible consequences of not following these procedures • common types and sources of contamination that occur in the work area, such as cross contamination • control methods and procedures used in the , such as reporting non-compliance and following instructions • storage and handling requirements for ingredients, materials and product used related to work role • housekeeping requirements and responsibilities relating to own work, and use and storage of housekeeping/cleaning equipment where required • purpose and importance of cleaning and sanitation procedures • suitable standard for materials, equipment and utensils used in the work area • waste collection, recycling and handling procedures relevant to own work responsibilities • procedures to follow in the event of pest sighting or discovery of infestation • clothing and footwear requirements for working in and/or moving between food handling areas • personal clothing maintenance, laundering and storage requirements • appropriate bandages and dressings to be used when undertaking food handling • cleaning procedures where relevant • recording requirements and responsibilities where relevant

Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • locate and follow workplace information relating to food safety responsibilities • monitor own work and implement any controls as required by the food safety program, such as visual inspection and checks • follow workplace procedures to maintain food safety as required by the food safety program relating to own work • identify and correct or report situations that do not meet the requirements of the food safety program and/or could result in unsafe food • handle, clean and store equipment, utensils, packaging materials and similar items according to the requirements of the food safety program as required by work role • maintain personal hygiene consistent with the food safety program • take necessary precautions when moving around the workplace and/or from one task to another to maintain food safety • wear and maintain appropriate clothing/footwear as required by work tasks and consistent with the requirements of the food safety program • report health conditions and illness as appropriate according to the food safety program • handle and/or dispose of out-of-specification or contaminated materials, ingredients and product, waste and recyclable material according to food safety program as required by work responsibilities • maintain the work area in a clean and tidy state • identify and report signs of pest infestation • clean and sanitise equipment according to enterprise procedures • record food safety information according to enterprise procedures • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Operate an Extraction Process
Unit Code	IND PHB2 12 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to set up, operate, adjust and shut down processes used to extract creamed honey and pure beeswax from crude honey using extraction equipments

Elements	Performance Criteria
1. Prepare the extraction equipment and process for operation	<p>1.1 Materials are confirmed, blended and prepared to meet production requirements.</p> <p>1.2 Workplace documentation relevant to work area activities is identified and followed.</p> <p>1.3 The required facilities, storage, equipment and personnel are made available.</p> <p>1.4 Line clearance procedures have been carried out.</p> <p>1.5 Procedures are followed to eliminate or control the risk of cross-contamination.</p> <p>1.6 Material is loaded into honey tanker.</p>
2. Operate and monitor the extraction process	<p>2.1 The extraction process is monitored to confirm that specifications are met.</p> <p>2.2 Out-of-specification product/process is identified, rectified and/or reported to maintain the process within specification.</p> <p>2.3 The work area is maintained according to housekeeping standards.</p> <p>2.4 Work is conducted according to environmental standards.</p> <p>2.5 Workplace documentation is maintained according to workplace reporting requirements.</p> <p>2.6 The cleaning cycle is undertaken according to company policies and procedures.</p>
3. Shut down the extraction process	<p>3.1 The process is shut down according to workplace procedures and work practices.</p> <p>3.2 Maintenance requirements are identified and reported according to workplace reporting requirements.</p>

Variable	Range
Legislative requirements	<p>May include:</p> <ul style="list-style-type: none"> • legislative and licensing requirements • Therapeutic Goods Act • weights and measures legislation • legislation relating to OHS, environmental management, equal opportunity and affirmative action, industrial awards and agreements

Equipment	<p>may include:</p> <ul style="list-style-type: none"> • blenders/mixers • Honey and beeswax tankers • tamping rods • collection vessels
Extraction process	<p>process may be:</p> <ul style="list-style-type: none"> • aqueous and/or alcohol based (temperature may or may not be applied during extraction process)
Workplace documentation	<p>work area activities include:</p> <ul style="list-style-type: none"> • specifications • manufacturing formulae • processing instructions • batch production records • Standard Operating Procedures (SOPs) • OHS information, including Material Safety Data Sheets(MSDS)
Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • Work activities are carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements and industrial awards and agreements

Evidence Guide	
Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • prepare the extraction process for operation, including following line clearance procedures • load materials and solvents to maximise extract collection • monitor the extraction process • maintain all necessary records.
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • purpose and principles of each stage of the extraction process, including the effect of herb density on filtration and packing process required for different types of herbs • basic operating principles of equipment, including main equipment components and equipment operating capacities and applications • quality requirements of materials and the effect of variation on the extraction process • process specifications, procedures and operating parameters for different products/materials • 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

	<ul style="list-style-type: none"> • methods used to monitor the extraction process, such as inspecting, measuring and testing as required by the process, and the ability to calculate yields • contamination/food safety risks associated with the extraction process • common causes of variation and corrective action required • hazards and controls, including the risks involved with the use of solvents, such as ethanol, and the limitations of protective clothing and equipment used • extraction process shutdown and changeover procedures and responsibilities • environmental issues and controls relevant to the extraction process, including waste collection and handling procedures related to the process • cleaning and sanitation procedures • workplace documentation and authorisation procedures 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • select, fit and use personal protective clothing and/or equipment • conduct pre-start checks, such as inspecting equipment condition to identify any signs of wear, confirming that equipment is clean and correctly configured for processing requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and placing sand filters/scourers in base of percolators where required • start, operate, monitor and adjust process to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, such as density of herbs in percolator, including re-packing of percolator as required • rate/amount of solvent addition • extract collection and yield • take corrective action in response to out-of-specification results • respond to and/or report equipment failure within level of responsibility • demonstrate batch/product changeovers including line clearance procedures • sort, collect, treat, recycle or dispose of waste • clean and sanitise equipment as required as required • complete workplace records as required • maintain work area to meet housekeeping standards • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce 		
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Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Implement Good Manufacturing Practice Procedures
Unit Code	IND PHB2 13 0613
Unit Descriptor	This unit of competency covers the skills and knowledge required to comply with relevant Good Manufacturing Practice (GMP) codes through the implementation of workplace GMP and quality procedures.

Elements	Performance Criteria
1. Identify requirements of GMP related to own work	<p>1.1 Sources of information on GMP requirements are located.</p> <p>1.2 GMP requirements and responsibilities related to own work are identified.</p> <p>1.3 The cleaning cycle is undertaken according to company policies and procedures.</p>
2. Ensure that personal hygiene and conduct meets GMP requirements	<p>2.1 Personal hygiene is made to meet GMP requirements.</p> <p>2.2 Clothing is prepared, used, stored and disposed of according to GMP and workplace procedures.</p> <p>2.3 Personal movement around the workplace is complied with area entry and exit procedures.</p>
3. Implement GMP requirements when carrying out work activities	<p>3.1 Work area, materials, equipment and product are routinely monitored to ensure compliance with GMP requirements.</p> <p>3.2 Raw materials, packaging components and product are handled/stored according to GMP and workplace procedures.</p> <p>3.3 Workplace procedures are followed to control resource allocation to meet GMP requirements.</p> <p>3.4 Common forms of contamination are identified and appropriate control measures are followed according to GMP requirements.</p> <p>3.5 The workplace is maintained in a clean and tidy order to meet GMP housekeeping standards.</p> <p>3.6 Work is conducted in accordance with workplace environmental guidelines.</p> <p>3.7 Out-of-specification or contaminated materials, packaging components/consumables and product, waste and recyclable materials are handled and disposed of according to GMP requirements and workplace procedures.</p> <p>3.8 Signs of unacceptable plant or equipment condition are identified and reported.</p>

4. Participate in improving GMP	<p>4.1 Processes, practices or conditions which could result in non-compliance with GMP are identified and reported according to workplace reporting requirements.</p> <p>4.2 Corrective action is implemented within level of responsibility.</p> <p>4.3 GMP issues are raised with designated personnel.</p>
5. Complete workplace documentation to support GMP	<p>5.1 Documentation and recording requirements are identified.</p> <p>5.2 Information is recorded according to workplace reporting procedures to meet GMP requirements.</p>

Variable	Range
Legislative requirements	<p>Typically reflected in procedures and specifications. Legislation relevant to this industry includes:</p> <ul style="list-style-type: none"> • relevant GMP codes • the Therapeutic Goods Act • other legislation and codes relevant to product and market • legislation relating to environmental management, occupational health and safety (OHS), anti-discrimination and equal opportunity
Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • Work activities are carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements and industrial awards and agreements
Unacceptable plant or equipment condition	<p>can include:</p> <ul style="list-style-type: none"> • damage to plant or equipment • failure of cleaning regime • signs of pest infestation

Evidence Guide	
Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • GMP is an ongoing and routine aspect of work responsibilities. Assessors should collect sufficient evidence to ensure that the skills and knowledge of this unit are routinely applied to the work environment. • Assessment must require the candidate to identify and demonstrate responsibilities for implementation of GMP in the workplace.
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • the role of GMP in preventing contamination, its relationship to legal requirements of pharmaceutical manufacturers and potential implications of non-compliance • GMP arrangements in the workplace, including relevant GMP codes of practice and related workplace policies and procedures to implement these responsibilities

	<ul style="list-style-type: none"> • the relationship between GMP and the quality system, personnel responsible for designing and managing GMP, personal role to maintain GMP, and the role of internal and external auditors as appropriate • procedures followed to investigate contamination events and performance improvement processes • personal clothing and footwear requirements for working in and/or moving between work areas • personal clothing use, storage and disposal requirements • awareness of common micro-biological, physical and chemical contaminants relevant to the work process, including the types of contamination likely to occur, such as cross-contamination, the conditions under which they occur, possible consequences and control methods to prevent occurrence • basic concepts of quality assurance, including quality specifications, operating parameters, validation procedures and control methods, and related documentation, including Standard Operating Procedures (SOPs) and/or batch instructions • control methods and procedures used in the work area to maintain GMP, including an understanding of the purpose of control, the consequence if not controlled and the method of control where relevant, as well as an understanding of the methods used to monitor process control • basic understanding of the properties, handling and storage requirements of raw materials, packaging components and final product handled and used • standards for materials, equipment and utensils used in the work area • procedures for responding to out-of-specification or unacceptable performance/outcomes • purpose of keeping records and the recording requirements of GMP, including product and materials traceability procedures • housekeeping requirements and responsibilities relating to own work, and use and storage of housekeeping/cleaning equipment where relevant • waste collection, recycling and handling procedures relevant to own work responsibilities • responsibilities for reporting and recording quality information 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • locate and follow workplace information relating to GMP responsibilities • identify and report situations that do or could compromise GMP • participate in procedures to support GMP within level of responsibility 		
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	<ul style="list-style-type: none"> • identify and respond to out-of-specification or unacceptable raw materials, packaging components, final or part processed product within level of responsibility • use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Operate Manual Bottling and Packaging Processes
Unit Code	IND PHB2 14 0613
Unit Descriptor	This specialist unit has been developed for the bottling and packaging of the honey and beeswax. It covers the skills and knowledge required to set up, operate and shut down a range of manual and basic bottling and packaging equipment and to perform associated manual operations

Elements	Performance Criteria
1. Prepare to operate manual or basic bottling and packaging equipment	<p>1.1 Product and materials are confirmed and available to meet production requirements.</p> <p>1.2 Product and materials are prepared to meet production requirements.</p> <p>1.3 Services are confirmed as available and ready for operation.</p> <p>1.4 Equipment is prepared and checked to confirm readiness for use.</p> <p>1.5 Equipment is set to meet production requirement.</p>
2. Operate and monitor manual or basic bottling and packaging processes	<p>2.1 The equipment is started up according to workplace procedures.</p> <p>2.2 Control points are monitored to confirm performance is maintained within specification.</p> <p>2.3 Bottling and packaging output is made to meet specification.</p> <p>2.4 Equipment is monitored to confirm operating condition.</p> <p>2.5 Out-of-specification product, process and equipment performance are identified, rectified and/or reported.</p> <p>2.6 The cleaning cycle is undertaken according to company policies and procedures.</p>
3. Shut down manual or basic bottling and packaging processes	<p>3.1 Equipment is shut down according to workplace procedures.</p> <p>3.2 Equipment is prepared for cleaning.</p> <p>3.3 Waste generated by both the process and the cleaning is collected, treated, and disposed of, or recycled according to workplace procedures.</p>
4. Record information	4.1 Workplace information is recorded in the appropriate format.

Variable	Range
Products and materials	may include: <ul style="list-style-type: none"> • capsules • cartons

	<ul style="list-style-type: none"> • corks • glue • hot melt • bottles (full or empty) • labels • hot wax • ink • nails
Services	<p>may include:</p> <ul style="list-style-type: none"> • power • compressed air • water • steam • inert gas • lubrication • vacuum
Equipment status	<p>involves:</p> <ul style="list-style-type: none"> • checking that hygiene and sanitation standards, safety standards and pre-start requirements are met and that equipment is operational • checking operation or calibration of measuring instrumentation
Control points	<p>These include:</p> <ul style="list-style-type: none"> • food safety (critical) • quality and regulatory control points • inspection points
Manual or basic bottling and packaging equipment	<p>Equipment will vary according to the bottling and packaging scope of the enterprise and includes equipment that requires full manual operation, including manual loading and unloading and all or some manual operations bottling and packaging operations. The unit can also apply to basic bottling and packaging equipment that includes some automatic operations. Examples include equipment that:</p> <ul style="list-style-type: none"> • needs manual loading and unloading • can process a limited number of bottles, cartons or pallets at a time • can perform some but not all of the bottling function (e.g. bottles but does not affix labels) • The range of equipment can include equipment associated with: <ul style="list-style-type: none"> • decanting • loading capsule, cork and carton magazines • depalletising • binning and de-binning • sealing • capsuling • labelling

	<ul style="list-style-type: none"> • inserting cork stoppers • tissue wrapping • gift boxing • nail gun operation • wax dipping bottles • stencilling • carton coding • carton erection • operating conveyors • carton turners and bottle counters • carton packing • pallet stacking
Policies and procedures	<p>May include:</p> <ul style="list-style-type: none"> • Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements
Workplace information	<p>can include:</p> <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules or instructions • work notes • Material Safety Data Sheets (MSDS) • manufacturer instructions • verbal direction from manager, supervisor or senior operator
Information systems	may be print or screen based

Evidence Guide	
Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • conduct pre-start checks on machinery used for manual bottling and packaging • start, operate, monitor and adjust equipment to achieve required quality outcomes • take corrective action in response to faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • Safely shut down equipment.
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Links to related equipment • Stages and changes which occur during the equipment operation • Effect of equipment operation stages on end product and output • Quality characteristics and uses of end product and output • Materials preparation requirements and effect of variation on the equipment operation

	<ul style="list-style-type: none"> • Emergency and troubleshooting procedures, including failure of services • Process specification, procedures and operating parameters • Equipment and instrumentation components, purpose and operation • Services required • Significance and method of monitoring control points within the equipment operation • Common causes of variation and corrective action required • hazards and controls, including manual handling • Lock-out and tag-out procedures • Procedures and responsibility for reporting problems • Shutdown sequence • Shutdown and cleaning requirements associated with changeovers and types of shutdown • Routine maintenance requirements • Waste handling requirements and procedures • Recording requirements and procedures 		
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Access workplace information to identify bottling and packaging requirements • Select, fit and use appropriate personal protective clothing and/or equipment • Confirm supply of necessary materials and services • Liaise with other work areas, which may include: <ul style="list-style-type: none"> ➤ maintenance ➤ materials supply ➤ bottling and packaging personnel • Prepare materials as required. This may include loading materials and confirming that: <ul style="list-style-type: none"> ➤ capsules meet specifications (e.g. colour, type and size) ➤ glue, hot melt or wax meets specifications (e.g. type and batch number) ➤ hot melt or wax is heated to required temperature ➤ bottles meet specifications (e.g. type, colour and size) ➤ bottles to be de-crowned meet specifications ➤ bottles to be decanted meet specifications ➤ cartons to be packed and sealed meet specifications ➤ cartons to be stencilled meet specifications ➤ bottles to be waxed meet specifications ➤ materials to be loaded into magazines meet specifications ➤ bottles to be binned or de-binned meet specifications ➤ bottles to be labelled meet specifications ➤ bottles to be tissue wrapped meet specifications ➤ boxes to be nailed meet specifications ➤ pallets to be stacked meet specifications • Confirm equipment status and condition. This may include: 		
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	<ul style="list-style-type: none"> ➤ confirming hygiene and sanitation standards have been met ➤ adjusting air pressure ➤ checking conveyor speed ➤ adjusting height and width to accommodate specific product and material specifications ➤ completing a test run ➤ confirming flow of line lube and water ➤ realigning diverters and turners to ensure flow is as instructed • Set up and start up the equipment • Monitor the equipment operation to identify out-of-specification results or non-compliance. This can involve monitoring: <ul style="list-style-type: none"> ➤ conveyor speed ➤ movement, spacing and direction of bottles or cartons on conveyor ➤ bottle cleanliness and draining effectiveness ➤ dryness of bottles ➤ glue length ➤ strength of carton seals ➤ shrinkage or fit of capsules ➤ stacking and stacking patterns meet specifications ➤ bottle counters are re-set at the start of each product ➤ bottles are waxed to correct level ➤ stencils applied are clear and legible ➤ wine levels meet specification ➤ ongoing quality of materials used ➤ ongoing appearance of applications • Monitor supply and flow of materials to and from the equipment • Take corrective action in response to out-of-specification results or non-compliance • Report and/or record corrective action as instructed • Sort, collect, treat, recycle or dispose of waste • Shut down equipment in response to an emergency situation • Shut down equipment in response to routine shutdown requirements. This may include removing product or consumables from the line • Prepare equipment for cleaning. This may involve draining and/or dismantling equipment, and removing waste either manually or by rinsing. in preparation for cleaning and sanitation. • Maintain work area to meet housekeeping standards • Identify, rectify and/or report environmental non-compliance according to enterprise procedures • Use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning,
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	<p>active listening, asking for clarification and seeking advice from supervisor</p> <ul style="list-style-type: none"> • Work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Operate the Labeling Process
Unit Code	IND PHB2 15 0613
Unit Descriptor	This unit covers the skills and knowledge required to set up, operate and shut down a range of semi-automated and automated equipment involved in the labelling process.

Elements	Performance Criteria
1. Prepare to operate labelling equipment	<p>1.1 Product and materials are confirmed and available to meet labelling requirements.</p> <p>1.2 Product and materials are prepared to meet labelling requirements.</p> <p>1.3 Services are confirmed as available and ready for operation.</p> <p>1.4 Equipment is prepared and checked to confirm readiness for use.</p> <p>1.5 Equipment is set to meet labelling requirements.</p> <p>1.6 The cleaning cycle is undertaken according to company policies and procedures.</p>
2. Operate and monitor the labelling process	<p>2.1 Labelling equipment is started up according to workplace procedures.</p> <p>2.2 Control points are monitoring to confirm performance is maintained within specification.</p> <p>2.3 Bottles are labelled according to specification.</p> <p>2.4 Labelling equipment is monitored to confirm operating condition.</p> <p>2.5 Out-of-specification products, process and equipment performance are identified, rectified and/or reported.</p>
3. Shut down the labelling process	<p>3.1 Labelling equipment is shut down according to workplace procedures.</p> <p>3.2 Labelling equipment is prepared for cleaning.</p> <p>3.3 Waste generated by both the process and cleaning procedures is collected, treated and disposed of, or recycled according to workplace procedures.</p> <p>3.4 Work is conducted in accordance with workplace environmental guidelines.</p>
4. Record information	<p>4.1 Workplace information is recorded in appropriate format.</p>

Variable	Range
Product and materials	May include: <ul style="list-style-type: none"> • filled bottles • labels • glue • neck ties • additional promotional dress
Services	May include: <ul style="list-style-type: none"> • power • compressed air • water
Equipment	may include: <ul style="list-style-type: none"> • wet gum labellers • pressure sensitive labellers • neck taggers
Policies and procedures	May include: <ul style="list-style-type: none"> • Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements
Control points	May include: <ul style="list-style-type: none"> • food safety (critical) • quality and regulatory control points • inspection points
Monitoring the process	may involve: <ul style="list-style-type: none"> • the use of production data, such as performance control charts
Process operation and monitoring functions	May include: <ul style="list-style-type: none"> • manual or involve the use of a process control system
Workplace information	May include: <ul style="list-style-type: none"> • Standard Operating Procedures (SOPs) • specifications • production schedules or instructions • work notes • Material Safety Data Sheets (MSDS) • manufacturer instructions • verbal direction from manager, supervisor or senior operator
Equipment status	May involves: <ul style="list-style-type: none"> • checking that hygiene and sanitation standards, safety standards and pre-start requirements are met and that equipment is operational • checking operation or calibration of measuring instrumentation
Information systems	may include: <ul style="list-style-type: none"> • print or screen based

Evidence Guide			
Critical Aspects of Competence	<p>Must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> • conduct pre-start checks on machinery used for labelling • start, operate, monitor and adjust process equipment to achieve required quality outcomes • take corrective action in response to typical faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • Safely shut down equipment. 		
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Purpose and principles of labelling equipment • Key features of labelling equipment and components • Links to related processes • Stages and changes which occur during the process • Effect of process stages on end product • Quality characteristics of end product • Product and materials preparation requirements and effect of variation on the process. This may include effect on end results of: <ul style="list-style-type: none"> ➤ glue temperature ➤ glue type ➤ wet bottles ➤ faulty label feed ➤ incorrect or inaccurate labels • Emergency and troubleshooting procedures • Process specification, procedures and operating parameters • Equipment and instrumentation components, purpose and operation • Basic operating principles of process control systems where relevant • Services required • Significance and method of monitoring control points within the process • Common causes of variation and corrective action required • Routine maintenance requirements • hazards and controls • Lock-out and tag-out procedures • Procedures and responsibility for reporting problems • Environmental issues and controls • Shutdown sequence • Shutdown and cleaning requirements associated with changeovers and types of shutdown • Waste handling requirements and procedures • Recording requirements and procedures • Cleaning and sanitation procedures where relevant 		
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	<ul style="list-style-type: none"> • Sampling procedures where relevant • Testing procedures where relevant • Routine maintenance procedures where relevant
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Access workplace information to identify labelling requirements • Select, fit and use appropriate personal protective clothing and/or equipment • Confirm supply of necessary materials and services. This may include: <ul style="list-style-type: none"> ➤ checking labelling materials meet workplace specifications ➤ checking bottles meet size and type specification and quality and hygiene standards ➤ confirming compressed air, water and power are available to equipment • Liaise with other work areas, which may include: <ul style="list-style-type: none"> ➤ maintenance personnel ➤ quality assurance personnel ➤ materials supply ➤ bottle supply operators ➤ bottle filling operators ➤ bottle sealing operators ➤ bottle capsuling operators ➤ administration or marketing • Prepare product and materials. This may include: <ul style="list-style-type: none"> ➤ heating glue to correct temperature ➤ checking glue meets specification according to label type ➤ confirming dryness of bottles in readiness for labels ➤ check labels meet specification of product e.g. alcohol content ➤ inserting labels, correctly orientated in magazine ➤ feeding label web through application mechanism • Confirm equipment status and condition. This may include completing a test run and checking: <ul style="list-style-type: none"> ➤ alignment of bottle feed screws and stars ➤ alignment of label pick up and application components ➤ out-feed components are aligned correctly and will not damage label ➤ label alignment, orientation and height meet specifications ➤ timing and alignment of web feed and bottle feedany related coders are correctly set up and operational • Set up and start up the process • Monitor the process and equipment operation to identify out-of-specification results or • non-compliance. This can involve monitoring: <ul style="list-style-type: none"> ➤ label adhesion

	<ul style="list-style-type: none"> ➤ label orientation ➤ label damage ➤ label positioning ➤ smooth versus bubbled labels ➤ misprinted labels ➤ any label or bottle coding applied as part of the process • Monitor supply and flow of materials to and from the process • Take corrective action in response to out-of-specification results or non-compliance • Report and/or record corrective action as instructed • Sort, collect, treat, recycle or dispose of waste • Shut down equipment in response to an emergency situation • Shut down equipment in response to routine shutdown requirements. This may include removing product or consumables from the line • Prepare equipment for cleaning. This may involve draining and/or dismantling equipment, and removing waste either manually or by rinsing, in preparation for cleaning and sanitation • Record workplace information • Maintain work area to meet housekeeping standards • Clean and sanitise equipment according to enterprise procedures • Take samples according to enterprise procedures • Conduct tests according to enterprise procedures • Carry out routine maintenance according to enterprise procedures • Identify, rectify and/or report environmental non-compliance according to enterprise procedures • Use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor • Work cooperatively within a culturally diverse workforce
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Participate in Workplace Communication
Unit Code	IND PHB2 16 0613
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

Elements	Performance Criteria
1. Obtain and convey workplace information	<p>1.1 Specific and relevant information is accessed from appropriate sources.</p> <p>1.2 Effective questioning, active listening and speaking skills are used to gather and convey information.</p> <p>1.3 Appropriate medium is used to transfer information and ideas.</p> <p>1.4 Appropriate non- verbal communication is used.</p> <p>1.5 Appropriate lines of communication with supervisors and colleagues are identified and followed.</p> <p>1.6 Defined workplace procedures for the location and storage of information are used.</p> <p>1.7 Personal interaction is carried out clearly and concisely.</p>
2. Participate in workplace meetings and discussions	<p>2.1 Team meetings are attended on time.</p> <p>2.2 Own opinions are clearly expressed and those of others are listened to without interruption.</p> <p>2.3 Meeting inputs are consistent with the meeting purpose and established protocols.</p> <p>2.4 Workplace interactions are conducted in a courteous manner.</p> <p>2.5 Questions about simple routine workplace procedures and matters concerning working conditions of employment are asked and responded to.</p> <p>2.6 Meetings outcomes are interpreted and implemented.</p>
3. Complete relevant work related documents	<p>3.1 Range of forms relating to conditions of employment is completed accurately and legibly.</p> <p>3.2 Workplace data is recorded on standard workplace forms and documents.</p> <p>3.3 Basic mathematical processes are used for routine calculations.</p> <p>3.4 Errors in recording information on forms/ documents are identified and properly acted upon.</p>

	3.5 Reporting requirements to supervisor are completed according to organizational guidelines.
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Variable	Range
Appropriate sources	May include but not limited to: <ul style="list-style-type: none"> • Team members • Suppliers • Trade personnel • Local government • Industry bodies
Medium	May include but not limited to: <ul style="list-style-type: none"> • Memorandum • Circular • Notice • Information discussion • Follow-up or verbal instructions • Face to face communication
Storage	May include but not limited to: <ul style="list-style-type: none"> • Manual filing system • Computer-based filing system
Protocols	May include but not limited to: <ul style="list-style-type: none"> • Observing meeting • Compliance with meeting decisions • Obeying meeting instructions
Workplace interactions	May include but not limited to: <ul style="list-style-type: none"> • Face to face • Telephone • Electronic and two way radio • Written including electronic, memos, instruction and forms, non-verbal including gestures, signals, signs and diagrams
Forms	May include but not limited to: <ul style="list-style-type: none"> • Personnel forms, telephone message forms, safety reports

Evidence Guide	
Critical Aspects of Competency	Demonstrates skills and knowledge to: <ul style="list-style-type: none"> • Prepare written communication following standard format of the organization • Access information using communication equipment • Make use of relevant terms as an aid to transfer information effectively • Convey information effectively adopting the formal or informal communication
Underpinning Knowledge and Attitudes	Demonstrate knowledge of: <ul style="list-style-type: none"> • Effective communication • Different modes of communication • Written communication • Organizational policies

	<ul style="list-style-type: none"> • Communication procedures and systems • Technology relevant to the enterprise and the individual's work responsibilities
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Follow simple spoken language • Perform routine workplace duties following simple written notices • Participate in workplace meetings and discussions • Complete work related documents • Estimate, calculate and record routine workplace measures • Do basic mathematical processes of addition, subtraction, division and multiplication • relate to people of social range in the workplace • Gather and provide information in response to workplace Requirements
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Work in Team Environment
Unit Code	<u>IND PHB2 17 0613</u>
Unit Descriptor	This unit covers the skills, knowledge and attitudes to identify role and responsibility as a member of a team.

Elements	Performance Criteria
1. Describe team role and scope	<p>1.1 The role and objective of the team are identified from available sources of information.</p> <p>1.2 Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources.</p>
2. Identify own role and responsibility within team	<p>2.1 Individual role and responsibilities within the team environment are identified.</p> <p>2.2 Roles and responsibility of other team members are identified and recognized.</p> <p>2.3 Reporting relationships within team and external to team are identified.</p>
3. Work as a team member	<p>3.1 Effective and appropriate forms of communications used and interactions undertaken with team members who contribute to known team activities and objectives.</p> <p>3.2 Effective and appropriate contributions are made to complement team activities and objectives, based on individual skills and competencies and workplace context.</p> <p>3.3 Protocols are observed in reporting using standard operating procedures.</p> <p>3.4 Contribute to the development of team work plans based on an understanding of team's role and objectives and individual competencies of the members.</p>

Variable	Range
Role and objective of team	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Work activities in a team environment with enterprise or specific sector • Limited discretion, initiative and judgment maybe demonstrated on the job, either individually or in a team environment
Sources of information	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Standard operating and/or other workplace procedures • Job procedures • Machine/equipment manufacturer's specifications and instructions • Organizational or external personnel • Client/supplier instructions

	<ul style="list-style-type: none"> • Quality standards • OHS and environmental standards
Workplace context	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Work procedures and practices • Conditions of work environments • Legislation and industrial agreements • Standard work practice including the storage, safe handling and disposal of chemicals • Safety, environmental, housekeeping and quality guidelines

Evidence Guide

Critical Aspects of competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Operate in a team to complete workplace activity • Work effectively with others • Convey information in written or oral form • Select and use appropriate workplace language • Follow designated work plan for the job • Report outcomes
Underpinning Knowledge and Attitude	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Communication process • Team structure • Team roles • Group planning and decision making
Underpinning Skills	<p>Demonstrate skills to:</p> <ul style="list-style-type: none"> • Communicate appropriately, consistent with the culture of the workplace
Resource Implications	<p>Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.</p>
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	<p>Competence may be assessed in the work place or in a simulated work place setting.</p>

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Develop Business Practice
Unit Code	IND PHB2 18 0613
Unit Descriptor	This unit specifies the outcomes required to establish a business operation from a planned concept. It includes researching the feasibility of establishing a business operation, planning the setting up of the business, implementing the plan and reviewing operations once commenced.

Elements	Performance Criteria
1. Identify business opportunity	<p>1.1 Business opportunities are investigated and identified.</p> <p>1.2 Feasibility study is undertaken to determine likely business viability.</p> <p>1.3 Market research on product or service is undertaken.</p> <p>1.4 Assistance with feasibility study of specialist and relevant parties is sought as required.</p> <p>1.5 Impact of emerging or changing technology including e-commerce, on business operations is evaluated.</p> <p>1.6 Practicability of business opportunity is assessed in line with perceived risks, returns sought and resources available.</p> <p>1.7 Business plan is completed for operation.</p>
2. Identify personal business skills	<p>2.1 Financial and business skills available are identified and taken into account when business opportunities are researched.</p> <p>2.2 Personal skills/attributes are assessed and matched against those perceived as necessary for a particular business opportunity.</p> <p>2.3 Business risks are identified and assessed according to resources available and personal preferences.</p>
3. Plan for establishment of business operation	<p>3.1 Business structure and operations are determined and documented.</p> <p>3.2 Procedures are developed and documented to guide operations.</p> <p>3.3 Financial backing is secured for business operation.</p> <p>3.4 Business legal and regulatory requirements are identified and complied.</p> <p>3.5 Human and physical resources required to commence business operation are determined,</p> <p>3.6 Recruitment strategies are developed and implemented.</p>

4. Implement establishment plan	<p>4.1 Marketing of business operation is undertaken.</p> <p>4.2 Physical and human resources are obtained to implement business operation.</p> <p>4.3 Operational unit is established to support and coordinate business operation.</p> <p>4.4 Monitoring process is developed and implemented for managing operation.</p> <p>4.5 Legal documents are carefully maintained and relevant records are kept and updated to ensure validity and accessibility.</p> <p>4.6 Contractual procurement rights for goods and services including contracts with relevant people are negotiated and secured as required in accordance with the business plan.</p> <p>4.7 Options for leasing/ownership of business premises identified and contractual arrangements are completed in accordance with the business plan.</p>
5. Review implementation process	<p>5.1 Process for implementation of business operation is developed and implemented.</p> <p>5.2 Improvements in business operation and associated management process are identified.</p> <p>5.3 Improvements are implemented and monitored for effectiveness.</p>

Variable	Range
Business opportunities	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • expected financial viability • skills of operator • amount and types of finance available • returns expected or required by owners • likely return on investment • finance required • lifestyle issues
Business viability	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • opportunities available • market competition • timing/ cyclical considerations • skills available • resources available • location and/ or premises available • risk related to a particular business opportunity, especially • in regard to Occupational Health and Safety and • environmental considerations
Specialist and relevant parties	<p>May include but not limited to:</p>

	<ul style="list-style-type: none"> • Chamber of commerce • Financial planners and financial institution representatives, business planning specialists and marketing specialists • accountants • lawyers and providers of legal advice • government agencies • industry/trade associations • online gateways • business brokers/business consultants
Personal skills/attributes	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • technical and/ or specialist skills • business knowledge and skills • entrepreneurship • willingness to take risks
Business risks	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • occupational health and safety and environmental considerations • relevant legislative requirements • security of investment • market competition • security of premises/ location • supply and demand • resources available
Human and physical resources	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • software and hardware • office premises • communications equipment • specialist services through outsourcing, contracting and consultancy • staff • vehicles
Operational unit	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • office location staffed with required personnel and equipped to service and support business • home-based site or other location such as leased or owned property
Legal documents	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • partnership agreements, constitution documents, statutory books for companies (Register of Members, Register of Directors and Minute Books), Certificate of Incorporation, Franchise Agreements and financial documentation, appropriate software for financial records • recordkeeping including personnel, financial, taxation, OHS and environmental
Contracts with relevant people	owners, suppliers, employees, landlords, agents, distributors, customers or any person with whom the business has, or seeks to have, a performance-based relationship

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge in:</p> <ul style="list-style-type: none"> • that a business operation has been planned and implemented from initial research into feasibility of the business and completion of the plan, through to implementing the plan and commencing operations • the ability to evaluate the results of research and assess the likely viability and practicability of a business opportunity, taking into account the current business/market climate and resources available
Underpinning Knowledge and Attitudes	<p>Demonstrate knowledge of:</p> <ul style="list-style-type: none"> • Federal and regional government legislative requirements affecting business operations, especially in regard to Occupational Health and Safety (OHS), Equal Employment Opportunity (EEO), industrial relations and anti-discrimination • Technical or specialist skills relevant to the business operation • Financing options • Business systems and operations • Relevant marketing, management, sales and financial concepts • Methods for researching business opportunities • Principles of risk management relevant to the business • Methods of identifying relevant specialist services to complement the business • Forms and administrative systems • Services available and charges • Planning and control systems (sales, • Advertising and promotion, distribution and logistics • Financial recording systems • Legal rights and responsibilities • Record keeping duties • Operational factors relating to the business (provision of professional services, products)
Underpinning Skills	<p>Demonstrate skills of:</p> <ul style="list-style-type: none"> • Literacy skills to interpret legal requirements, company policies and procedures and immediate, day-to-day demands • Marketing skills • Business planning skills • Entrepreneurial skills • Problem-solving skills • OHS skills • Time management skills • Belief in services and products offered by the business • Communication skills including questioning, clarifying, reporting, and giving and receiving constructive feedback • Technical and analytical skills to interpret business documents, reports and financial statements and projections

	<ul style="list-style-type: none"> • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities • Problem solving skills to develop contingency plans • Using computers and software packages to record and manage data and to produce reports • Literacy skills to enable interpretation of business information, numeracy skills for data analysis to aid research • Research skills to identify a business opportunity and to conduct a feasibility study • Analytical skills to assess personal attributes and to identify business risks • Observation skills for identifying appropriate people, resources and to monitor work
Resource Implications	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	Competence may be assessed through: <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Occupational Standard: Processing Honey and Beeswax Level II	
Unit Title	Standardize and Sustain 3S
Unit Code	IND PHB2 19 0613
Unit Descriptor	This unit of competence covers the knowledge, skills and attitudes required by worker to standardize and sustain 3S to his/her workplace. It covers responsibility for the day- to-day operations of the workplace and ensuring that continuous improvements of Kaizen elements are initiated and institutionalized.

Elements	Performance Criteria
1. Prepare for work.	<p>1.1 Work instructions are used to determine job requirements, including method, material and equipment.</p> <p>1.2 Job specifications are read and interpreted following working manual.</p> <p>1.3 OHS requirements, including dust and fume collection, breathing apparatus and eye and ear personal protection needs are observed throughout the work.</p> <p>1.4 Safety equipment and tools are identified and checked for safe and effective operation.</p> <p>1.5 Tools and equipment are prepared and used to implement 3S.</p>
2. Standardize 3S.	<p>2.1 Plan is prepared and used to standardize 3S activities.</p> <p>2.2 Tools and techniques to standardize 3S are prepared and implemented based on relevant procedures.</p> <p>2.3 Checklists are followed for standardize activities and reported to relevant personnel.</p> <p>2.4 The workplace is kept to the specified standard.</p> <p>2.5 Problems are avoided by standardizing activities.</p>
3. Sustain 3S.	<p>3.1 Plan is prepared and followed to standardize 3S activities.</p> <p>3.2 Tools and techniques to sustain 3S are discussed, prepared and implemented based on relevant procedures.</p> <p>3.3 Workplace is inspected regularly for compliance to specified standard and sustainability of 3S techniques.</p> <p>3.4 Workplace is cleaned up after completion of job and before commencing next job or end of shift.</p> <p>3.5 Situations are identified where compliance to standards is unlikely and actions specified in procedures are taken.</p> <p>3.6 Improvements are recommended to lift the level of compliance in the workplace.</p> <p>3.7 Checklists are followed to sustain activities and reported to relevant personnel.</p> <p>3.8 Problems are avoided by sustaining activities.</p>

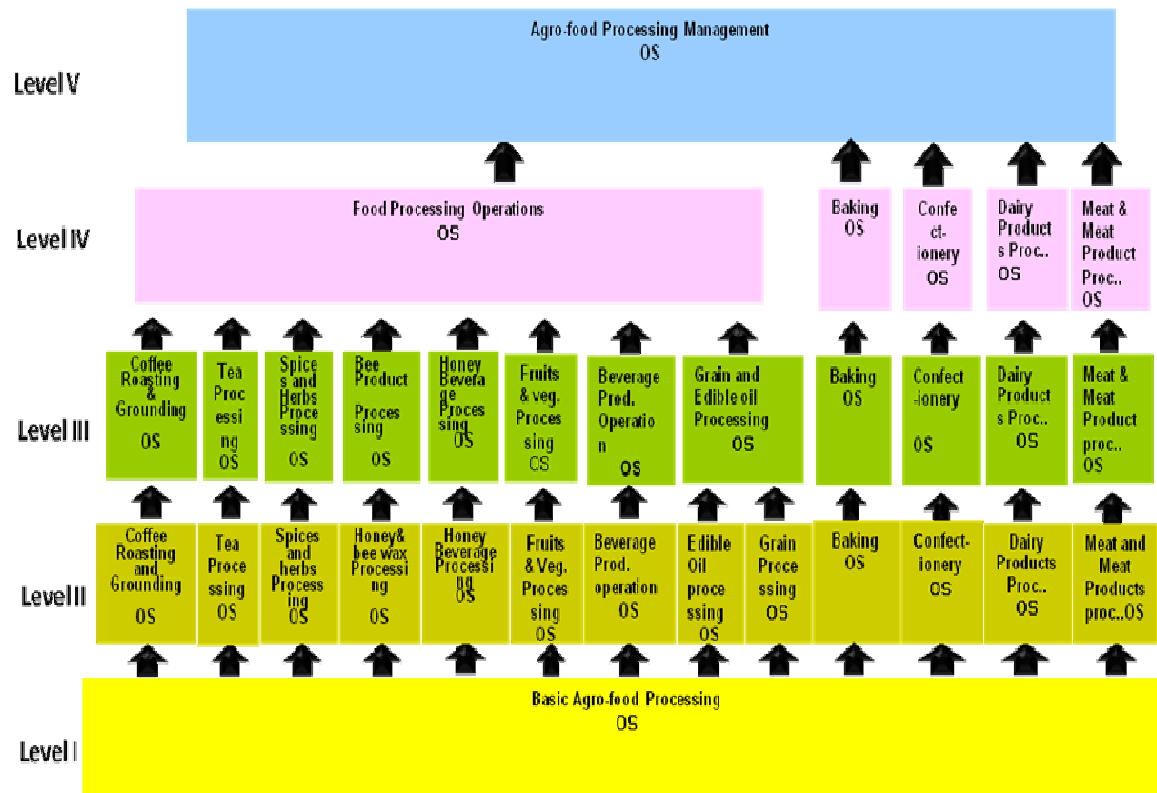
Variable	Range
OHS requirements	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Are to be in accordance with legislation/ regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of material, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances. • Personal protective equipment is to include that prescribed under legislation/regulations/codes of practice and workplace policies and practices. • Safe operating procedures are to include, but are not limited to the conduct of operational risk assessment and treatments associated with workplace organization. • Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and site evacuation.
Safety equipment and tools	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • dust masks / goggles • glove • working cloth • first aid • safety shoes
Tools and equipment	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • paint • hook • sticker • signboard • nails • shelves • chip wood • sponge • broom • pencil • shadow board/ tools board
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S Job Cycle Charts • Visual 5S • The Five Minute 5S • Standardization level checklist • 5S checklist • The five Whys and one How approach(5W1H) • Suspension • Incorporation • Use Elimination

Relevant procedures	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • Assign 3S responsibilities • Integrate 3S duties into regular work duties • Check on 3S maintenance level • OHS measures such as signage, symbols / coding and labeling of workplace and equipment • Creating conditions to sustain your plans • Roles in implementation
Reporting	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • verbal responses • data entry into enterprise database • brief written reports using enterprise report formats
Relevant personnel	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • supervisors, managers and quality managers • administrative, laboratory and production personnel • internal/external contractors, customers and suppliers
Tools and techniques	<p>May include but not limited to:</p> <ul style="list-style-type: none"> • 5S slogans • 5S posters • 5S photo exhibits and storyboards • 5S newsletter • 5S maps • 5S pocket manuals • 5S department/benchmarking tours • 5S months • 5S audit • Awarding system • Big cleaning day • Patrolling system may include: <ul style="list-style-type: none"> ➤ Top management Patrol ➤ 5S Committee members and Promotion office Patrol ➤ Mutual patrol ➤ Self-patrol ➤ Checklist patrol ➤ Camera patrol

Evidence Guide	
Critical Aspects of Competence	<p>Demonstrates skills and knowledge to:</p> <ul style="list-style-type: none"> • Discuss the relationship between Kaizen elements. • Standardize and sustain 3S activities by applying appropriate tools and techniques.
Underpinning Knowledge and Attitudes	<p>Demonstrates knowledge of:</p> <ul style="list-style-type: none"> • Elements of Kaizen • Ways to improve Kaizen elements • Benefits of improving kaizen elements • Relationship between Kaizen elements • The fourth pillar of 5S

	<ul style="list-style-type: none"> • Benefits of standardizing and sustaining 3S • Procedures for standardizing and sustaining 3S activities • Tools and techniques to sustain 3S • Relevant and environment requirements • Plan and report • Method of communication
Underpinning Skills	<p>Demonstrates skills of:</p> <ul style="list-style-type: none"> • improving Kaizen elements by applying 5S • standardizing and sustaining procedures and techniques to avoid problems • technical drawing • procedures to standardizing 3S activities • analyzing and preparing shop layout of the workplace • standardizing and sustaining checklists • preparing and implementing tools and techniques to sustain 3S • working with others • reading and interpreting documents • observing situations • solving problems by applying 5S • communication skills • preparing labels, slogans, etc. • gathering evidence by using different means • using Kaizen board properly in accordance the procedure • reporting activities and results using report formats
Resources Implication	Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices.
Methods of Assessment	<p>Competence may be assessed through:</p> <ul style="list-style-type: none"> • Interview / Written Test • Observation / Demonstration with Oral Questioning
Context of Assessment	Competence may be assessed in the work place or in a simulated work place setting.

Sector: Industry
Sub-sector: Agro-food Processing



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This occupational standard was developed on the date of June 25, 2013 at Debre Zeyit Ethiopian Management Institute.

COMMENT TEMPLATE

The Federal TVET Agency values your feedback of the document.
If you would like someone to personally contact you, please provide the following information:
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Please, leave a comment.

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