



Australian Government

AHCBEK310 Process raw wax into moulds

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to process raw wax using wax processing equipment into wax moulds.

The unit applies to individuals who work under broad direction and take responsibility for their own work. They use discretion and judgement in the selection, allocation and use of available resources and to solve problems.

State and territory legislation, regulations and local government by-laws apply in some jurisdictions to beehive ownership and compliance with biosecurity codes of practice.

Pre-requisite Unit

Nil

Unit Sector

Beekeeping (BEK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Receive and prepare raw wax	1.1 Receive and store raw wax from beekeeping operations 1.2 Ensure wax is quarantined to prevent possible cross contamination with operational hives and hive components according to biosecurity procedures 1.3 Prepare the raw wax for processing according to workplace procedures and processing equipment requirements
2. Prepare wax	2.1 Identify health and safety hazards and risks and take action

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
processing equipment	according to workplace procedures 2.2 Select, ensure serviceability, fit and use personal protective equipment 2.3 Select tools and equipment for processing wax according to work requirements 2.4 Obtain and prepare moulds for processed wax according to workplace procedures 2.5 Clean wax processing equipment according to workplace requirements 2.6 Conduct pre start checks of processing equipment according to operating instructions 2.7 Rectify or report equipment faults according to workplace procedures
3. Process raw wax ready for separation	3.1 Safely load raw wax in to processing equipment according to workplace procedures 3.2 Start-up wax processing equipment and raise the wax temperature to predetermined specification according to workplace operating and safety procedures 3.3 Maintain processing temperature for desired period of time according to workplace procedures 3.4 Monitor equipment operation and rectify or report equipment faults according to workplace procedures
4. Separate residues from wax and produce moulds	4.1 Separate residual honey from wax and store or dispose of according to required purpose, workplace procedures and food safety and handling procedures 4.2 Separate slum gum from wax and process according to workplace and biosecurity procedures 4.3 Transfer processed wax into moulds according to workplace procedures 4.4 Remove wax from moulds after cooling and store according to workplace and safe handling procedures
5. Shut down and clean processing equipment	5.1 Shut down wax processing equipment according to operating instructions 5.2 Reserve slum gum according to reprocessing procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.3 Clean wax processing equipment according to operating instructions 5.4 Clean wax processing work area according to workplace procedures 5.5 Dispose of waste according to workplace, environmental and biosecurity procedures
6. Update and maintain records	6.1 Label wax moulds with batch information according to workplace procedures 6.2 Update records for wax production according to workplace procedures 6.3 Maintain mandatory records for wax production according to legislative and biosecurity reporting requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret equipment operator instructions
Writing	Complete workplace documentation using appropriate language and in required format
Numeracy	- Interprets numerical information to monitor and adjust controls for temperature and timing of wax processing - Perform basic calculation to determine weights and volumes of wax used in processing equipment
Navigate the world of work	Take responsibility for following explicit and implicit workplace procedures, biosecurity code of practice and legislative requirements
Get the work done	- Make routine decisions and implements standard procedures for routine tasks, using formal decision making processes for more complex situations - Address problems and initiates standard procedures in response to equipment operation and faults, and applies problem solving techniques to determine a solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCBEK310 Process raw wax into moulds	Not Applicable	New Unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCBEK310 Process raw wax into moulds

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has processed raw wax into moulds, on at least one occasion including:

- received and stored wax, ensuring no cross contamination with operational hive components
- prepared the raw wax for loading into processing equipment
- identified hazards and risks and implemented controls, including fitting and use of personal protective equipment (PPE) and safe work practices
- selected tools, equipment and moulds required for the wax processing
- ensured wax processing equipment is clean and ready for service, conducted pre start checks and identified, rectified or reported faults
- loaded raw wax into processing equipment, started equipment and monitored temperature, time and equipment operation during processing
- separated residual honey and slum gum from wax and transferred molten wax to moulds
- stored or disposed of residual honey and slum gum according to workplace, biosecurity and food safety and handling procedures
- removed wax from moulds, labelled and placed into storage according to workplace procedures
- shut down and cleaned processing equipment according to operating instructions
- cleaned work area and disposed of all waste material according to workplace waste management procedures and environmental procedures
- updated records and reports according to workplace, biosecurity and legislative requirements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- principles and practices of processing honey bee wax
- sources of raw wax used for processing and its preparation, including:
 - cappings from honey extraction
 - bur comb
 - damaged or rotated brood and honey comb
 - slum gum
- bees wax properties and impact on processing
- types and uses of residual materials in unprocessed and processed bees wax, including:
 - burned or cooked honey
 - slum gum
- wax processing equipment, their maintenance and operation, including:
 - types of wax processing equipment and their operation, solar, hot water, steam, direct heat
 - signs of faults in equipment operation and reporting procedures
 - repairs and maintenance requirements
 - cleaning procedures
- wax processing temperatures and timing
- types of moulds
- hygiene and biosecurity requirements and procedures for processing wax
- cleaning procedures and disposal of waste
- storage requirements for unprocessed and processed bees wax
- health and safety, hazards and risks and their controls when using wax processing equipment, including:
 - working with hot materials and equipment
 - PPE
 - manual handling
 - processing equipment safety
 - safe use of tools and equipment
- stock control records, labelling and mandatory records and reporting requirements for processing wax.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a wax processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - raw bees wax
 - tools for processing wax
 - PPE

- specifications:
 - workplace procedures and specifications for processing raw wax
 - manufacturer's operating instructions for wax processing equipment
 - access to specific biosecurity codes of practice.

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

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