Modification history

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| Release | Comments |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCBEK305 | Extract honey |
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| Application | This unit of competency describes the skills and knowledge required to prepare comb and safely operate equipment used to extract honey fit for human consumption. The work may be carried out on hive, in a mobile processing facility or a purpose built fixed facility.  The unit applies to beekeepers 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.  Honey extraction for human consumption is subject to State and Territory food safety legislation and regulations.  No other occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Beekeeping (BEK) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1.Prepare to extract honey | 1.1 Identify and select appropriate extraction method and equipment for type of honey production used  1.2 Identify work health and safety hazards and take action to minimise risks to self and others  1.3 Select, ensure serviceability and use personal protective equipment  1.4 Ensure extraction equipment and storage containers are clean, dry, sanitised and serviceable according to workplace procedures, sanitizer product labels and safety data sheets  1.5 Undertake personal hygiene requirements according to workplace and food safety procedures |
| 2. Prepare unprocessed honey comb | 2.1 Identify, select and reserve frames or sections for unprocessed honey comb according to workplace product and customer requirements  2.2 Separate and clean sections or divide comb according to workplace product requirements  2.3 Package, label and store raw honeycomb according to workplace quality assurance, food safety, handling and packaging requirements |
| 3.Extract honey | 3.1 Identify and comply with quality assurance and food safety and handling requirements throughout the process of extracting honey  3.2 Inspect comb visually for areas of brood and prepare comb to avoid damage to brood  3.3 Prepare comb to assist the extraction process according to workplace procedures  3.4 Expose the honey by decapping or breaking comb avoiding unnecessary damage to cells, frames and hive components according to extraction method selected  3.5 Operate the extraction equipment to remove honey from comb according to equipment operation instructions and safety procedures |
| 4. Handle extracted frames and supers | 4.1 Remove frames from extractor and return to supers according to extraction method, workplace and biosecurity procedures  4.2 Store extracted supers in suitable bee and pest proof facility awaiting return to apiary according to workplace pest management and biosecurity procedures  4.3 Return frames to apiary according to workplace barrier system and biosecurity procedures  4.4 Reserve frames due for rotation or damaged and store for wax extraction or repair according to workplace, quarantine and biosecurity procedures |
| 5.Handle extracted honey | 5.1 Ensure extracted honey meets temperature specifications to assist removal of wax, air, pollen and detritus  5.2 Test moisture content of honey and take action to maintain appropriate moisture according to workplace procedures  5.3 Monitor conditions of honey fermentation and implement procedures to reduce risk |
| 6.Store honey | 6.1 Store cleaned honey in containers to meet quality assurance standards, food health regulations and customer requirements  6.2 Obtain a reference sample of honey, label and store according to workplace procedures  6.3 Clean, dry and sanitise all equipment and work area according to workplace procedures. |
| 7. Collect and store cappings and raw comb for future wax processing | 7.1 Identify comb suitable for future wax processing  7.2 Extract residual honey from cappings and "free" comb according to workplace procedures  7.3 Consolidate wax cappings and "free" comb and store according to workplace, quarantine and biosecurity procedures |
| 8. Maintain records of honey production | 8.1 Update records for honey production according to workplace procedures and legislative 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. | |
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| Skill | Description |
| Reading | * Interprets product labels, safety data sheets, instructions, procedures and specifications and consolidates information to determine actions and activities in honey extraction process |
| Writing | * Complete workplace documentation using appropriate terminology and in required format |
| Numeracy | * Interprets numerical information related to testing of moisture levels in honey samples |
| Navigate the world of work | * Takes responsibility for following policies, procedures and regulatory requirements for extracting honey, maintaining food safety standards and quality assurance |
| Get the work done | * Takes responsibility for planning, sequencing and prioritising tasks for operation of extraction equipment and collection and storage of extracted honey |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCBEK305 Extract honey | AHCBEK305 Extract honey | Updated to meet Standards for Training Packages  Added Elements and changes to Performance Criteria for clarity and completeness | No equivalent unit |

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

| TITLE | Assessment requirements for AHCBEK305 Extract honey |
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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 on at least one occasion the individual has demonstrated that they have extracted honey from mature honey comb including:   * identified and selected appropriate extraction method for honey production process * identified hazards and risks and implemented control measures and used equipment safely * selected and used appropriate personal protective equipment and complied with workplace personal hygiene practices * identified, selected and prepared tools and equipment required for extraction process and ensured appropriate food hygiene procedures were performed on them * identified, selected, prepared and stored unprocessed comb according to workplace product requirements * identified and complied with quality assurance and food safety and handling requirements while extracting honey * safely extracted honey using extraction equipment in compliance with quality assurance and food safety requirements * prepared the comb for extraction avoiding brood comb according to the extraction method and equipment being used * organised frames from the extraction process stored, returned to apiary or retained for repair or future wax processing in compliance with pest management, biosecurity and barrier system requirements * ensured extracted honey was maintained at specified to assist removal of wax, air, pollen and detritus * tested moisture content of honey and took action to maintain appropriate condition * monitored conditions conducive to honey fermentation and implemented procedures to reduce risk * stored honey in containers and obtained a reference sample following to meet quality assurance standards, food health regulations and customer requirements * identified comb suitable for wax processing, collected, removed residual honey and stored wax cappings following workplace, quarantine and biosecurity procedures * cleaned and sanitised honey extraction equipment * maintained appropriate records. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * principles and practices of honey extraction * recognition of different types of bee comb and maturity including: * brood worker and drones * queen cells * mature and immature honey comb * pollen cells * biosecurity protocols for honey extraction and transport of supers and hive components to extraction site * processing of raw honey comb * sections * cutting/slicing comb from frames * honey extraction processes including: * pressing * centrifugal/spinning * gravity draining or drip method * equipment commonly used to extract honey and the safe operation and maintenance requirements * hygiene and sanitation procedures and materials used for tools, equipment and storage of extracted honey * storage requirements of honey, honey comb, extracted frames and supers including bulk storage and pest management * food safety systems and requirements relevant to honey extraction * quality assurance tests and standards for extracted honey * temperature and the effect of heat on the extraction processes and quality of honey * work health and safety issues associated with extraction and extraction technologies * record keeping systems and labelling for extracted honey * preparation and storage procedures for comb at time of extraction for later wax processing. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * either a portable honey extraction unit or a permanent extraction facility * resources, equipment and materials: * mature honey comb ready for extraction * specific tools and equipment for the type of extraction method employed * personal protective equipment * sanitising chemicals and equipment * specifications: * workplace procedures and processes * manufacturer’s operating instructions for specific equipment, machinery, and extraction technology * safety data sheets for chemical sanitisers * workplace instructions/job/client specifications * access to specific legislation/codes of practice regarding honey extraction and food safety   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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