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 3.0. |

| AHCPHT3008 | Operate a mechanical harvester |
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| Application | This unit of competency describes the skills and knowledge required to set up and operate a mechanical harvester to meet harvesting requirements.  The unit applies to individuals who work under broad direction and take responsibility for their own work.  No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.  All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace. |
| Prerequisite Unit | Nil |
| Unit Sector | Production horticulture (PHT) |

| 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 for mechanical harvesting | 1.1 Interpret and confirm work instructions and identify potential WHS hazards and controls in accordance with workplace procedures  1.2 Select and fit personal protective clothing and equipment according to job requirements  1.3 Ensure materials and equipment are ready for use in accordance with workplace requirements  1.4 Set up equipment to meet harvesting requirements and operating instructions |
| 2. Operate mechanical harvester | 2.1 Start up and operate equipment according operating instructions  2.2 Monitor equipment performance to confirm performance is maintained within specification  2.3 Adjust equipment operation to safely meet workplace weather and terrain conditions  2.4 Identify, rectify or report problems and out-of-specification equipment performance according to workplace procedures  2.5 Maintain equipment in good working order according to operating instructions |
| 3. Complete mechanical harvesting operations | 3.1 Shut equipment down safely according to operating instructions  3.2 Clean and store equipment according to workplace practices  3.3 Collect, treat, dispose of waste generated by both the process and cleaning procedures according to environmental and work practices  3.4 Conduct work to comply with workplace environmental guidelines  3.5 Record workplace information according to workplace procedures |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Reading | * Comprehend textual information from a variety of workplace documents accurately |
| Writing | * Produce workplace documents using industry-based vocabulary, grammar and conventions |
| Oral Communication | * Converse clearly using industry-specific language |
| Navigate the world of work | * Comply with policies and procedures * Recognise own work performance and seek assistance where required |
| Get the work done | * Plan and organise work efficiently * Identify and solve problems creatively * Use the main features and functions of digital tools to identify and apply information in wine industry operations * Recognise and act on opportunities for continuous improvement in accordance with workplace practices |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCPHT3008 Operate a mechanical harvester | FDFWGG3008A Operate a mechanical harvester | Updated to meet Standards for Training Packages  Code changed to reflect changed training package  Minor changes to performance criteria for clarity | Equivalent unit |

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

| TITLE | Assessment requirements for AHCPHT3008 Operate a mechanical harvester |
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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 set up and operated a mechanical harvester to meet harvesting requirements, and demonstrated the following at least once:   * using personal protective clothing and equipment * selecting and ensuring readiness of equipment and preparing according to instructions * attaching and setting up equipment to meet requirements * starting, operating and shutting down equipment in accordance with operation instructions and requirements of workplace and task * adjusting operation to suit weather and terrain conditions * taking corrective action in response to out-of-specification results or non-compliance * complying with work health and safety (WHS) procedures * managing the disposal of waste according to workplace procedures * recording information according to procedures. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * effect of different climatic conditions on timing and management of harvest * weather and terrain impact on mechanical harvester operation * annual growth stages of grapevines: * budburst * flowering * on-set of ripening * maturity * basic vine physiology, as it applies to: * water intake * nutrient uptake * photosynthesis * respiration and transpiration * translocation * parts of the root, trunk, shoot and fruit systems of the grapevine, their role in how the vine works and their contribution to fruit quality: * buds, nodes and tendrils * cambium, epidermis, phloem and xylem * leaf blade, bract and petiole * bunch, berries and flowers * vine types, their characteristics and uses: * family, genus and species * Vitis vinifera and commercial varieties * native species and hybrids (e.g. V. labrusca) * rootstocks and scion stock * industry processes for new variety development * key grape varieties and their distinguishing features for harvesting: * berry and bunch characteristics * frost and disease resistance * flavour and style as it applies to harvest * factors that affect grape ripening * effect of fruit quality on wine * quality assurance procedures and controls * common problems and anomalies * harvesting procedures and operating parameters: * purpose of mechanical harvester components * mechanical harvester operation according to harvesting conditions: * crop level * grape variety * vine age * row height, width and trellis design * slope, angle of row * visibility * other vineyard activities * monitoring mechanical harvester operation: * vine damage * grape quality and maturity * harvesting effectiveness (amount of fruit left in fruiting zone) * matter other than grape (MOG) collected * hours worked and service history of machinery * problems and anomalies * climatic conditions * routine maintenance procedures for equipment where relevant * cleaning and storage requirements associated with changeovers and types of shutdowns * significance and method of monitoring equipment performance * role and operating difficulties of harvester support * common faults and corrective action required * work health and safety (WHS) hazards and controls, including selecting, fitting and using appropriate personal protective clothing and equipment * environmental issues and controls * procedures and responsibility for reporting problems * recording and reporting procedures and requirements * cleaning and storage procedures. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a workplace or an environment that accurately represents workplace conditions * resources, equipment and materials: * personal protective clothing and equipment * equipment, services and corresponding information * products and materials * internal and external customers and suppliers * cleaning procedures, materials and equipment * documentation and recording requirements and procedures * specifications: * work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements * instructions, information, specifications and schedules.   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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