



Australian Government

AHCBAC414 Supervise agricultural crop harvesting

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 7.0.

Application

This unit of competency describes the skills and knowledge required to assess crop harvesting condition and resource requirements, plan a strategy for harvest operations and supervise the harvesting of an agricultural crop.

The unit applies to individuals who take responsibility for own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Broad Acre Cropping (BAC)

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. Prepare for harvesting	1.1 Assess crop maturity and quality standards required in preparation for harvesting 1.2 Assess the role of technology in improving efficiencies 1.3 Determine and implement pre-harvest treatments according to crop production plan 1.4 Identify and comply with licence or permit requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Check insurance requirements are in place and implement risk management strategies 1.6 Identify health and safety hazards, assess risk and develop and implement controls procedures
2. Prepare a harvesting plan	2.1 Assess optimum timing for harvest according to crop maturity assessment 2.2 Assess resource requirements for size of crop and estimated timing of harvest 2.3 Identify storage resources and strategies for handling harvested crop 2.4 Identify potential disruptions to harvest operations and prepare contingency procedures 2.5 Identify and arrange fire prevention and control procedures according to risk assessment 2.6 Develop work team communications procedures for harvesting operations
3. Implement harvest plan	3.1 Arrange and confirm labour and equipment resources for harvesting operations within budgetary constraints 3.2 Communicate harvesting plan and communication procedures to work team and contractors 3.3 Implement harvesting operations and contingencies procedures according to impact of weather, equipment or technology and work team performance 3.4 Coordinate and monitor equipment performance 3.5 Control contamination and biosecurity threats according to workplace procedures and quality standards
4. Complete harvest operation	4.1 Assess crop quality and segregate according to marketing grades 4.2 Monitor moisture content according to industry classification standards 4.3 Assess and reconcile harvesting operations and outcomes against harvest strategy 4.4 Record information on harvesting operations 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.

Skill	Description
Reading	Identify, collate and analyse documentation for crop and harvest requirements for incorporation in harvest plan
Oral Communication	Use collaborative and inclusive language and techniques including active listening, questioning and reading of verbal and non-verbal signals to convey and clarify information, confirming work team understanding and compliance with harvesting procedures
Numeracy	Use formulae and numerical information to determine timing of harvest and establish volumes of harvested crop for transport and storage requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCBA414 Supervise agricultural crop harvesting	AHCBA405 Supervise agricultural crop harvesting	Edited Application for clarity Minor changes and consolidation of Performance Criteria for clarity Foundation Skills refined Performance Evidence and Knowledge Evidence clarified and terminology updated Amended structure of Assessment Conditions	Equivalent

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 AHCBA414 Supervise agricultural crop harvesting

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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 on at least one occasion planned and supervised the harvest of a broadacre agricultural crop and has:

- organised and scheduled maintenance of plant and equipment or technology
- assessed the use of technology in improving efficiencies
- established strategies, procedures and controls for crop harvesting
- arranged and confirmed labour and equipment resources for crop harvesting
- checked to ensure insurance requirements are in place and implemented risk management strategies
- implemented safe workplace and environmental practices
- considered and implemented contingencies
- developed crop harvesting plan, procedures and controls
- implemented and supervised health and safety procedures during harvesting operations, including:
 - fire prevention and control plans
 - personal safety
 - safe use of equipment
- estimated crop yield and storage requirements
- maintained budgetary controls
- assessed crop maturity and quality in readiness for harvesting
- arranged storage and delivery requirements
- communicated with work team and contractors
- implemented work health and safety and biosecurity procedures during harvest operations.

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:

- harvesting strategies for various agricultural crops
- quality standards for harvested crops, including:
 - standards for food safety
 - national and international seed certification standards
 - silos and grain storage standards for harvested crops
 - standards for handling genetically modified (GM) crops
- resource requirements for harvesting, including:
 - machinery and equipment
 - crop storage
 - human resources
 - materials and consumables
- crop features and recognition of readiness for harvesting, including:
 - sampling crops
 - crop measurement techniques and parameters
 - assessing samples for harvesting
 - post-harvest treatments of crops
 - crop maturity and yield potential
 - grain or seed quality
 - grain market information and sources
- pre-harvest treatments for the control and/or eradication of pests and disease
- operation of crop harvesting machinery and equipment, including:
 - functions and limitations of harvesting equipment
 - safety and use of equipment
 - handling and manoeuvring of harvesting equipment
 - pre- and post-operational checks on tools, harvesting machinery and equipment
 - routine, service and maintenance procedures for tools, harvesting machinery and equipment
- principles of precision agriculture and the role of technology in improving efficiencies, including:
 - self-drive, global navigation satellite systems (GNSS) and laser technologies
 - remote sensors
 - remote piloted systems
 - controlled traffic farming (CTF) principles and impacts
 - variable rate technology (VRT)
- federal and international standards for harvested crops
- procedures for crop handling and hygiene
- workplace health and safety procedures including:

- hazards and risk assessment
- machinery hazards
- fire risk for equipment and stored crop
- working at heights and confined spaces with storage bins
- power lines and elevated equipment safety
- workplace environmental and biosecurity policies and procedures
- location and relative skills and abilities of available contractors
- weather conditions affecting harvest operations
- relevant legislation, codes of practice and workplace requirements, including:
 - workplace health and safety
 - contractor engagement
 - pest control and chemical use
- environmental controls and codes of practice applicable to harvesting operations
- workplace biosecurity policies and procedures.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated on a broadacre farm with maturing crop or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - crop nearing maturity
 - planning and project management tools
 - harvesting tools, equipment or technology and machinery
 - crop sampling equipment
- specifications:
 - workplace policies, procedures and processes
 - workplace harvesting plans and specifications
 - legislation and codes of practice relevant to crop harvesting
 - industry standards for crop quality and condition for sale
- relationships:
 - work team and contractors
- timelines:
 - specified in harvest plan to preserve quality.

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

Links

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