



Australian Government

Assessment Requirements for AHCBAC417 Manage agricultural crop production

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.

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, implemented and monitored the production of a broadacre agricultural crop from planting to harvest and has:

- applied environmental protection strategies for land use
- set objectives and milestones for a cropping program
- determined soil quality and land use capability
- determined crop nutrient requirements and developed and implemented a fertiliser program
- predicted weed infestations and implemented control strategies
- monitored and managed crop water requirements avoiding soil degradation
- demonstrated use of technology to improve efficiency
- prepared budgets for the production cycle
- developed and implemented plans, programs and monitoring procedures for:
 - cropping
 - crop establishment and maintenance
 - harvesting
 - environmental management and minimising waste
- checked and maintained irrigation and drainage systems
- assessed crop yields and evaluated production performance
- implemented workplace health, safety policies
- communicated with harvesting and transport operators on issues related to crop harvest procedures and performance expectations
- monitored and implemented workplace health, safety and environmental policies and procedures
- recorded and stored crop production records.

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:

- agricultural crops and their cultural requirements
- land and soil conditions and assessment, including:
 - soil nutrient and fertility
 - interpretation of soil conditions and analysis
 - crop nutrient requirements
 - impact of soil biology on soil condition and nutrient availability
 - effects of soil characteristics on nutrient availability
 - soil moisture and impact on crop development
- managing water reserves, including:
 - strategies for retaining natural soil moisture
 - irrigation strategies for broadacre crops
 - maintaining reserves of water for irrigation
- precision agriculture and the role of technology in improving efficiencies, including:
 - self-drive, auto steer, global navigation satellite systems (GNSS) and laser technologies
 - digital and remote sensors
 - remote piloted systems
 - controlled traffic farming (CTF) principles and impacts
 - variable rate technology (VRT)
- budgeting and financial analysis techniques, including:
 - basic financial analysis
 - estimating costs
 - importance of financial records
- environmental protection strategies
- pest and weed management and control strategies, including:
 - weeds and infestation patterns and methods of control
 - use of strategic grazing
 - cultural and mechanical controls
 - integrated pest management strategies
- work health and safety legislative requirements, including:
 - safe handling
 - chemical and hazardous substances
 - fire safety
 - personal protection
 - working at heights and confined spaces with storage bins
 - power lines and elevated equipment safety

- environmental legislation and codes of practice, relating to crop production.

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 suitable for agricultural crop production or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - agricultural crop
 - chemicals and consumables for fertilising and treating crops
- specifications:
 - workplace policies, procedures and processes
 - safety data sheets
 - workplace production plans, specifications and financial budgets
 - legislation and codes of practice relevant to agricultural crop production.
- relationships:
 - harvesting and transport operators
- timelines:
 - specified in schedules.

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

Links

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