



Australian Government

Assessment Requirements for AHCBAC413 Plan and implement agricultural crop maintenance

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 and implemented an agricultural crop maintenance program for a broadacre crop and has:

- reviewed and assessed historical data to input into crop maintenance plan, including:
 - soil health, moisture and nutrition
 - weather conditions
 - crop growth and load potential
 - proximity and history of previous crops
- identified likely threats to crop from pests, weeds and diseases, including recognised damage to crop caused by weeds, pests or diseases
- recognised poor growth and lack of vigour in crop caused by nutrient deficiency
- assessed crop needs, monitored crop and recorded results
- planned and implemented control strategies for the following:
 - nutrient deficiencies
 - disease outbreaks
 - pest and weed infestations
- measured soil moisture and estimated water needs
- applied pesticides or nutrient treatments
- communicated with industry, suppliers and work team
- planned and monitored crop water requirements, including:
 - measure soil moisture and interpreted data
 - determined water requirements from survey advice and weather forecasts
- monitored and assessed maturity of crop
- determined time of harvest with specialist advice
- considered the role of technology in improving efficiencies
- identified hazards, assessed risks and implemented controls

- documented relevant crop management data
- implemented workplace environmental practices.

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:

- crop growth stages and keys
- crop growth requirements compared to soil nutrient status
- soil moisture and management strategies for broadacre crops, including:
 - working with natural rainfall and soil moisture
 - water storages and irrigation practices
 - measuring soil moisture and determining crop moisture requirements
- fertiliser and soil ameliorant types and application times, methods and rates
- factors leading to development of chemical resistance
- principles of 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)
- life-cycles of pest, diseases and weeds
- pests, diseases and weeds control strategies, including:
 - chemical
 - mechanical
 - biological
 - integrated pest and weed management techniques
- workplace health and safety, legislative requirements and workplace policies and procedures, including:
 - safety in the workplace
 - chemical and hazardous substances
 - fire safety
 - personal protection
 - power lines and elevated equipment safety
- environmental protection legislation and codes of practice.

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 broadacre farm with an existing crop or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - crop
 - planning and project management tools
 - tools, equipment and machinery
 - personal protective equipment
 - chemicals and consumables for fertilising and treating pasture
- specifications:
 - workplace policies, procedures and processes
 - safety data sheets
 - workplace production plans and specifications
 - legislation and codes of practice relevant to crop production
 - industry standards for crop production
- relationships:
 - work team.

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>