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 6.0. |

| AHCBAC306 | Establish agricultural crops |
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| Application | This unit of competency describes the skills and knowledge required to establish agricultural crops.  The unit applies to individuals who work under broad direction and take responsibility for own work including limited responsibility for the work of others. They use discretion and judgement in the selection and use of available resources and complete routine activities.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Broad Acre Cropping (BAC) |

| 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 machinery and equipment for use | 1.1 Select and prepare machinery and equipment according to work plan and biosecurity procedures  1.2 Attach and calibrate equipment according to work plan specifications and operator instructions  1.3 Identify work health and safety hazards, assess risk and implement controls according to workplace procedures |
| 2. Prepare for agricultural crop establishment | 2.1 Ensure soil and weather conditions comply with planned outcomes  2.2 Confirm soil test results and identify appropriate soil amendments  2.3 Prepare seeding, fertilising, and pest and weed control requirements according soil conservation and sustainable land management practices and procedures  2.4 Prepare contingency plans for unforeseen weather conditions |
| 3. Sow the crop | 3.1 Conduct seeding and fertiliser applications using technology to ensure most efficient performance according to work plan  3.2 Coordinate pest and weed control treatment with seeding and fertiliser applications  3.3 Identify environmental implications of sowing operations, assess impact and implement controls to mitigate environmental damage |
| 4. Complete seeding operations | 4.1 Maintain seeding, machinery and equipment operation records according to workplace record keeping procedures  4.2 Report machinery and equipment faults according to workplace procedures  4.3 Clean, secure and store machinery and equipment according to manufacturer specifications, biosecurity and 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 | * Interpret plans and strategies for crop establishment * Interpret manufacturer specifications, work and maintenance plans, and safety data |
| Numeracy | * Calculate rates of application of seed, treatments and fertilisers, and calibrate equipment and machinery to deliver specified rates |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCBAC306 Establish agricultural crops  Release 2 | AHCBAC306 Establish agricultural crops  Release 1 | Changes to Application. Changes to sequencing and editing of Performance Criteria. Added Foundation Skills. Updated Performance Evidence, Knowledge Evidence and Assessment Conditions | Equivalent |

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

| TITLE | Assessment requirements for AHCBAC306 Establish agricultural crops |
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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 established at least 2 agricultural crops and has:   * identified health and safety hazards, assessed the risk and implemented controls * sown seed and applied fertiliser at the required placement and rate * coordinated weeds, pest and disease controls with sowing, including: * identified types of weeds, pests and diseases harmful to crop establishment * selected and applied controls * prepared and safely operated machinery and equipment, including: * performed pre-operational and safety checks * serviced and maintained machinery and equipment * calibrated according to planned outcomes * attached and detached supplementary equipment * recognised and reported machinery faults and perform minor repairs * cleaned, secured and stored machinery and equipment * implemented emergency operating procedures for at least 2 of the following soil and/or weather conditions: * wet and boggy soil * icy and slippery * hot and dry fire conditions * ??? * implemented procedures for safety, environmental and sustainable land management practices * used technology to improve efficiency * maintained accurate records for the following: * equipment faults and servicing * workplace hazards and incidents * crop establishment operations * assess and calculate the application of fertiliser/pesticide requirements and application rates * used equipment safely to perform the following operations: * tilled the soil * applied pre-planting treatments * sowed seed * applied fertiliser * monitored environmental impact of establishing crop * followed workplace health and safety, environmental and biosecurity 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:   * crop types, preparation of seeds, seeding methods and application techniques * fertiliser types, rates of application and crop nutrient requirements * effects of weather conditions both normal and adverse, on seeding and fertilising applications * operating principles and operating methods for machinery and equipment, including: * pre-operational and safety checks, servicing and maintenance procedures for seeding machinery and equipment * principles of weight distribution with regard to load shifting and vehicle movement * role of technology in improving efficiency * sustainable land management and soil conservation techniques including, controlled traffic farming (CTF) * positive and negative environmental practices and methods to mitigate damage associated with seeding operations * procedures for cleaning, securing and storing machinery, equipment and materials * enterprise policies regarding seeding operations, and recording and reporting routines * workplace health and safety policies and procedures including: * use of pesticides and fertilizers * personal protective equipment and when and how it should be used * relevant state/territory legislation and regulations * farm fire safety with dried crops and stubble and accumulation in equipment * licensing requirements and the use and control of machinery and equipment on public land * workplace biosecurity and environmental policies. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:     * physical conditions: * skills must be demonstrated on a farm or an environment that accurately represents workplace conditions * resources, equipment and materials: * seeds, fertilisers and treatments * use of tools, equipment and machinery for preparing and sowing crops * use of personal protective equipment * specifications: * use of workplace policies, procedures, processes * access to safety data sheets for fertilisers and treatments * use of workplace plans and specifications * relationships: * supervisor * timeframes: * according to specified timeframes and efficiencies.   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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