Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version X.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCSPO305 | AHCSPO305 Treat planting seed |
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| Application | This unit of competency describes the skills and knowledge required to apply a range of treatments to planting seed using specialised seed treatment machinery and equipment.  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. All work is carried out to comply with workplace procedures.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Seed Processing (SPO) |

| 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. Select and prepare for treatment of planting seeds and grains | 1.1 Determine seed type, location and volume for treatment from work plan and storage schedule  1.2 Confirm seed treatment requirements and specifications from work plan  1.3 Confirm seed is in a suitable pre-treatment condition according to specifications  1.4 Confirm transfer and storage requirements of pre and post seed treatment according to work plan and seed storage schedule  1.5 Select and prepare seed treatment materials and consumables according to workplace procedures and treatment specifications |
| 2. Select and prepare seed treatment machinery and equipment for use | 2.1 Select and prepare seed processing machinery and equipment according to work plan  2.2 Conduct pre-operational checks on machine according to manufacturer specifications, workplace requirements and biosecurity procedures  2.3 Identify work health and safety hazards, assess risk and implement controls  2.4 Calibrate and adjust settings of machinery and equipment to comply with seed processing specifications  2.5 Charge machinery with treatments according to work place procedures and manufacturer instructions  2.6 Perform a sample seed treatment run to confirm settings and seed treatment performance against specifications according to workplace procedures |
| 3. Operate seed treatment machinery and equipment | 3.1 Select, check and use personal protective equipment (PPE) according to workplace health and safety procedures  3.2 Transfer seeds for treatment to storage bins and hoppers according to work plan, operator requirements and seed storage schedule  3.3 Operate seed treatment machinery and equipment safely according to manufacturer operating procedures  3.4 Monitor the performance and efficiency of machinery operation and make adjustments to maintain optimum treatment performance and safety  3.5 Sample and monitor treated seed and make adjustments to machinery to maintain specified quality standards  3.6 Monitor input and output seed storage capacities and implement mitigation procedures to maintain safe and efficient seed storage levels |
| 4. Complete and report on seed treatment machinery and equipment operation | 3.1 Implement seed treatment machinery shut-down procedures to manufacturer's specifications and workplace requirements  3.2 Implement operator level maintenance procedures for seed treatment machinery and equipment according to work place and manufacturer requirements  3.3 Identify and report faults and performance problems of seed treatment machinery and equipment according to workplace procedures  3.4 Clean, secure and store seed treatment machinery and equipment according to workplace and environmental procedures  3.5 Retrieve and store unused treatment materials and consumables and store/dispose according to workplace and environmental procedures |
| 5. Maintain records and reporting for treated seed | 5.1 Update records of treated seeds and grains according to workplace procedures  5.2 Update records of treated seed storage according to storage schedule and workplace procedures  5.3 Identify and report seed treatment and machinery irregularities 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 | * Interpret work plans, manufacturer specifications and operator instruction for using a screen cleaner for seed |
| Oral communication | * Use industry language and concepts, and tone and pace appropriate for reporting to supervisor |
| Numeracy | * Calculate volumes and ratios relevant to the preparation of treatments for seed and the calibration of equipment for application of treatments |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCSPO305 Treat planting seed | AHCSPO305 Operate seed treatment machinery  Release 1 | Change to title.  Major changes and additions to Elements, and Performance Criteria.  Added Foundation skills. Updated Performance Evidence, Knowledge Evidence and Assessment Conditions | No equivalent unit |

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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 AHCSPO305 Treat planting seed |
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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 treated seed using seed treatment machinery and equipment and has:   * prepared the seed resources and machinery for treatment * set up and prepared seed treatment machinery * calculated, calibrated and measured dose rates * formulated a chemical mix to achieve treatment goals according to specifications * maintained safe and efficient seed storage during processing * operated seed treatment machinery and equipment safely and efficiently * cleaned and stored machinery, equipment according to workplace, and environmental procedures * maintained and reported seed treatment operations according to workplace 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:   * principles and practices for operating seed treatment machinery * basics of programmable logic controller/treatment control systems and electrical process * drying, scalping and aspiration of treated seed * expectations and limitations of different types of seed coating machines * interaction of biological components and their effect on other chemicals, powders, polymers and heat * use and differences in biological components in seed coatings * types of seed treatment machinery and equipment * seed treatments their purpose and application, including: * chemical types and classes * difference between coating and pelleting which includes <5% weight gain film coating (insecticide/fungicide) or >5% weight gain is pelleting * disposal of waste chemical * hazards of chemicals * labelling requirements associated with coated seed * methods of applying chemical and basic recipe formula * methods of applying powders * workplace health and safety considerations in the seed treatment process, including personal protective equipment (PPE) * rules and regulations for storage, transportation and bunding. |

| 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 in a seed processing plant, farm or an environment that accurately represents workplace conditions * resources, equipment and materials: * seed treatment machinery * seed treatment consumables, materials and chemicals * tools and equipment for calibration and adjustments * use of personal protective equipment * specifications: * use of workplace procedures * use of manufacturer operating instructions for equipment * use of workplace instructions and specifications * use of safety data sheets (SDS) * relationships: * supervisor   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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