# **Modification history**

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

AHCSPO3XX	Process planting seed	
Application	This unit of competency describes the skills and knowledge required to operate seed processing machinery and equipment to clean, grade, and prepare grains and seeds for planting or further pre-planting treatments.	
	The unit applies to individuals who take responsibility for their 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	
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
Select and prepare for processing of planting	1.1 Determine seed type, location and volume for processing from work plan and storage schedule	
seeds and grains	1.2 Confirm seed processing requirements and specifications from work plan	
	1.3 Confirm transfer and storage requirements of pre and post seed processing according to work plan and seed storage schedule	
2. Select and prepare seed processing machinery and	2.1 Select and prepare seed processing machinery and equipment according to work plan	
equipment	2.2 Conduct pre-operational checks of 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 Perform a sample seed run to confirm settings and seed processing performance against specifications according to workplace procedures	
3. Operate seed processing 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 processing to storage bins and hoppers according to work plan, operator requirements and seed storage schedule	
	3.3 Operate seed processing 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 performance and safety	
	3.5 Sample and monitor processed 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 according to workplace procedures and storage schedule	

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
4. Complete seed processing machinery and	4.1 Implement seed processing machinery shut-down procedures according to manufacturer specifications and workplace requirements
equipment operation	4.2 Implement operator level maintenance procedures for seed treatment machinery and equipment according to work place and manufacturer requirements
	4.3 Identify and report faults and performance problems of seed processing machinery and equipment according to workplace procedures
	4.4 Clean, secure and store seed processing machinery and equipment according to biosecurity requirements and to prevent cross contamination
5. Maintain records and reporting for processed	5.1 Update records of processed seeds and grains according to workplace procedures
seed	5.2 Update records of seed storage according to storage schedule and workplace procedures
	5.3 Identify and report seed processing 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.		
Skill	Description	
Reading	Interpret work plans, seed processing quality specifications, seed processing equipment manufacturer specifications and operator instruction	
Oral Communication	Use industry language and concepts, and tone and pace appropriate for reporting to supervisor	
Numeracy	Adjust and calibrate seed processing machinery and equipment	

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCSPO3XX Process planting seed	New Unit	New unit to replace previous seed processing units, AHCSPO301 Operate a screen cleaner for seed processing AHCSPO302 Operate an indent cylinder AHCSPO303 Operate a gravity table AHCSPO304 Operate seed modification machinery AHCSPO306 Operate specialised seed processing machinery	No equivalent unit

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 AAHCSPO3XX Process seed or
	grains

#### **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 processed planting seed or grains according to a defined quality specification and include at least 3 of the following processes:

- separated seed from impurities and contaminants
- graded seed by size
- graded seed by weight/density
- graded seed by deformity
- · graded seed by colour
- modified seed

There must also be evidence that the individual has:

- identified seed, location and volume requiring processing
- coordinated access and storage of seeds with seed storage schedule
- selected, set up and prepared seed processing machinery and equipment
- operated seed processing machinery safely within specification
- · monitored seed processing and implemented mitigation procedures to maintain quality
- maintained safe and efficient seed storage during processing
- shut down, cleaned and maintained seed processing equipment
- maintained records and reporting according to workplace procedures.

## **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:

- basic understanding of seed biology in relation to viability and seed cleaning processes
- principles and practices for operating seed processing machinery, including:
  - safety equipment and safe operation of machinery
  - operator servicing and maintenance
  - calibration and settings for quality outcomes of different seed and grain types
- the basic principles of seed processing equipment, their operation and effects on seeds including:
  - screen cleaners
  - indent cylinder
  - gravity tables
  - airlegs and winnowers
- seed modification machinery for de-awners, clippers and scarifiers
- optical/colour sorters
- floatation tanks
- · magnetic rollers
- dryers
- spirals
- velvet rollers
- workplace health and safety in the seed treatment process, including personal protective equipment (PPE)
- basics of programmable logic controller/treatment control systems and electrical process
- operation and maintenance of machinery
- basic seed storage requirements and scheduling during seed processing
- biosecurity and cross contamination during seed processing
- important seed and grain quality standards affecting seed processing, equipment setup and monitoring
- record keeping and reporting procedures.

### **Assessment Conditions**

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

## **Assessment 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 processing machinery and equipment
- tools and equipment for calibration and adjustments
- use of specific items of personal protective equipment
- specifications:
  - use of workplace procedures
  - use of manufacturer operating instructions for equipment
  - use of workplace instructions and specifications
- 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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	https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72