



**Australian Government**

# **FWPFGM2213 Process seed**

**Release: 1**

## FWPFGM2213 Process seed

### Modification History

| Release | Comment                                                                                                                                                                                                               |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Replaces equivalent FPIFGM2213B Process seed, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2.<br><br>This is the first release of this unit in the new standards format. |

### Application

This unit of competency describes the outcomes required to treat, store and despatch seed.

The unit applies to processing seed in a variety of work settings, including forest environments, farms, agriculture, nurseries and local councils.

No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.

### Pre-requisite Unit

Nil

### Unit Sector

Forest Growing and Management

### Elements and Performance Criteria

| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>                                                                                                                                                                                      |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Prepare to process seed                       | <p>1.1 Interpret and check work order, with appropriate personnel, if required</p> <p>1.2 Identify and adhere to site environmental protection measures in line with relevant regulations and workplace requirements for processing seed</p> <p>1.3 Select and check equipment appropriate to work requirements for operational effectiveness in line with manufacturer recommendations</p> |

|                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | 1.4 Check seed processing operations for safe working conditions and plans in line with site procedures and environmental requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2. Treat and store seed                      | <p>2.1 Separate seeds from other materials, weigh and store in line with species and site procedures</p> <p>2.2 Treat seeds to prevent deterioration in line with seed species and site procedures</p> <p>2.3 Record seed information accurately in line with site procedures</p> <p>2.4 Package seed for storage in line with industry and workplace requirements.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 3. Prepare seed sample for viability testing | <p>3.1 Identify and check seed sample for testing in line with work order</p> <p>3.2 Remove seed sample from lot and prepare for testing in line with site procedures, and industry, organisational and environmental requirements</p> <p>3.3 Clearly label and package representative seed sample for despatch to testing body in line with site procedures</p> <p>3.4 Record seed sample information accurately in line with site procedures.</p>                                                                                                                                                                                                                                                                                                                                                                        |
| 4. Despatch seed                             | <p>4.1 Interpret and check seed request specifications, with appropriate personnel</p> <p>4.2 Retrieve seed from storage, and calculate quantities and species of seed to meet request specifications</p> <p>4.3 Weigh, document and place each seed species in an appropriate container in line with request requirements and site procedures</p> <p>4.4 Mix multiple seed lots thoroughly, as required in line with request specifications</p> <p>4.5 Accurately and clearly label seed and seed mixtures in line with industry requirements and site procedures</p> <p>4.6 Organise and undertake despatch of seed in line with request specifications and site procedures</p> <p>4.7 Record and report seed processing results in line with industry requirements, site procedures and environmental requirements.</p> |

## Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

|                               |                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Numeracy skills to:           | <ul style="list-style-type: none"><li>• calculate seed weight and quantity using scales</li><li>• identify and calculate percentages in specifications for seed mix</li><li>• estimate impact of time on storage of seed</li><li>• estimate time to complete work tasks when processing seed</li><li>• undertake numerical calculations on seed processing equipment</li></ul> |
| Oral communication skills to: | <ul style="list-style-type: none"><li>• ask questions to clarify instructions</li><li>• explain routine procedures to others</li></ul>                                                                                                                                                                                                                                         |
| Reading skills to:            | <ul style="list-style-type: none"><li>• read and follow information on equipment and in workplace procedure manuals on safety and environmental requirements when processing seed</li><li>• interpret instructions combining of written and pictorial information on equipment or in operational manuals</li></ul>                                                             |
| Writing skills to:            | <ul style="list-style-type: none"><li>• complete seed records and labels accurately and legibly using correct technical and enterprise specific vocabulary</li></ul>                                                                                                                                                                                                           |
| Problem solving skills to:    | <ul style="list-style-type: none"><li>• use and maintain equipment and tools for processing seed</li><li>• identify and apply different workplace requirements to plant species in seed processing and storage.</li></ul>                                                                                                                                                      |

## Range of Conditions

Not Applicable

## Unit Mapping Information

FPIFGM2213B Process seed.

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

## Assessment Requirements for FWPFGM2213 Process seed

### Modification History

| Release | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | <p>Replaces equivalent FPIFGM2213B Process seed, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format.</p> <p>Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement</p> |

### Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- apply effective methods to treat seed, including fungicides and cleaning
- test, package and store seed species using:
  - vacuum sealing
  - use of inert atmospheres, including nitrogen and carbon dioxide
  - control of packing environment, including temperature, light and moisture
- operate and maintain seed processing equipment including electric and manual scales, packaging material, seed cleaning machine, seed lot mixing device, lifting equipment
- separate seeds, using one or more of the following methods:
- hand selection
  - wind separation and winnowing
  - sieving
  - vibrating
  - flotation
  - drying
  - crumbling of husks
- despatch seed in line with seed request specifications, including:
  - seed species
  - percentage of seed mix

- pure graded seed
- rate of sown
- dispatch container
- method of dispatch
- sowing equipment to be used
- record seed processing information and results and maintain workplace information

## Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- using seed material effectively and efficiently
- types of seed processing tools and equipment, including electric and manual scales, packaging material, seed cleaning machine, seed lot mixing device, lifting equipment
- seed separation methods and their uses including:
  - hand selection
  - wind separation and winnowing
  - sieving
  - vibrating
  - flotation
  - drying
  - crumbling of husks
- impact and application procedures of seed treatments including fungicides and cleaning
- hazards associated with the storage, treatment and despatch of seed
- seed species and treating, packaging and storage processes
- seed treatments and storage requirements for different seed species
- types of diseases and pests likely to infect the species
- problem identification and resolution strategies, and common fault finding techniques when processing seed
- appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks when processing seed
- workplace procedures for recording and reporting workplace records and seed information including:
  - species
  - time and date of harvest
  - time and date of receipt into the store
  - place or origin of seed
  - container identifier
- packaging including:
  - vacuum sealing
  - use of inert atmospheres, including nitrogen and carbon dioxide
  - control of packing environment, including temperature, light and moisture

- request specifications including:
  - seed species
  - percentage of seed mix
  - pure graded seed
  - rate of sown
  - dispatch container
  - method of dispatch
  - sowing equipment to be used
- appropriate container criteria:
  - length of time seed will be stored
  - method to be used to transport seed
  - equipment to be used for sowing seed
  - quantity of seed
  - size of individual seeds

## Assessment Conditions

The following resources must be made available:

- workplace location or simulated workplace, required to treat, store and despatch seed.
- materials and equipment relevant to undertaking seed processing work applicable to this unit equipment, including electric and manual scales, packaging material, seed cleaning machine, seed lot mixing device, lifting equipment
- specifications and work instructions
- personal protective equipment suitable to process seed
- safety equipment
- relevant personnel for the purposes of communicating information

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence

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