



Australian Government

Department of Education, Employment and Workplace Relations

FPIFGM3202B Extract seed

Release: 1

FPIFGM3202B Extract seed

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit describes the outcomes required to extract and process native or non-native seed using an extraction unit. It includes seed storage requirements and extraction unit maintenance

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication

This unit replaces FPIFGM3202A Extract seed

Application of the Unit

Application of the unit

The unit involves extracting seed in a variety of work settings, including forest environment settings such as farms, agriculture, workshops, domestic, nurseries and local councils

The skills and knowledge required for competent workplace performance are to be used within the scope of the person's job and authority

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability skills This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Receive seed-bearing material into store	1.1. Applicable occupational health and safety (OHS), environmental, legislative and organisational requirements relevant to extracting seed are identified and followed 1.2. Work order is reviewed and checked with appropriate personnel 1.3. Seed bearing material is received, visually assessed, and species are identified and checked with container label 1.4. Received containers are weighed and identified in line with site procedures 1.5. Material is stored in dry and well-ventilated conditions in line with site procedures 1.6. Communication with others is established and maintained in line with OHS requirements
2. Extract seed	2.1. Seed is extracted in line with work order, and environmental and OHS requirements 2.2. Seed extraction processes are planned and checked for safe working conditions 2.3. Extraction units and equipment are selected appropriate to work requirements and checked for operational effectiveness in line with manufacturer recommendations 2.4. Seed extraction systems are operated and monitored in line with manufacturer recommendations 2.5. Seed-bearing material is placed in or on extraction unit and agitation is undertaken as required to maximise yield 2.6. Seed capsules are inspected and unextracted seed is reprocessed as required to ensure maximum yield
3. Clean and store seed	3.1. Seed is separated from other material, weighed and stored in line with species requirements and site procedures 3.2. Seed information is accurately recorded in line with site procedures 3.3. Seed is packaged for storage in line with industry, legislative, organisational and environmental requirements
4. Clean and maintain extraction unit	4.1. Residue and other waste material is disposed of in line with site environmental management guidelines

ELEMENT**PERFORMANCE CRITERIA**

- 4.2. Extraction units and equipment are cleaned, maintained and calibrated in line with manufacturer recommendations, site procedures and environmental requirements
- 4.3. Abnormal operation or faults with extraction units and equipment are reported for corrective action in line with site procedures
- 4.4. Work areas are cleaned and maintained in line with site procedures, and organisational and environmental requirements
- 4.5. Seed extraction information and results are **recorded and reported** in line with site procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Required skills

- Technical skills sufficient to use and maintain seed extraction units; efficiently and safely carry out seed extraction techniques; identify a range of seed species from capsules and apply accurate identifying information
- Communication skills sufficient to use appropriate communication and interpersonal techniques with colleagues and others
- Literacy skills sufficient to record and report workplace information; maintain documentation
- Numeracy skills sufficient to apply appropriate mathematical techniques to calculate seed weights
- Problem solving skills sufficient to identify problems and equipment faults; demonstrate appropriate response procedures

Required knowledge

- Applicable commonwealth, state or territory legislation, regulations, standards, codes of practice and established safe practices relevant to the full range of processes for extracting seed
- Environmental protection requirements, including the safe disposal of waste material, the minimisation of environmental impact, and the cleaning of plant, tools and equipment
- Organisational and site standards, requirements, policies and procedures for extracting seed

REQUIRED SKILLS AND KNOWLEDGE

- Environmental risks and hazards
- Hazards associated with seed extraction, processing and storage
- Range of seed species, including native and non-native
- Seed extraction processes for native and non-native species
- Storage procedures and requirements for different seed species
- Established communication channels and protocols
- Problem identification and resolution strategies, and common fault finding techniques
- Types of tools and equipment, and procedures for their safe use and maintenance
- Appropriate mathematical procedures for estimating and measuring, including calculating time to complete tasks
- Procedures for recording and reporting workplace information

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to provide evidence that they can apply safe and efficient techniques to identify, extract, clean and store seed in line with species requirements and organisational guidelines

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to, and satisfy, all of the requirements of the elements of this unit and include demonstration of:

- following applicable commonwealth, state or territory legislative and regulatory requirements and codes of practice relevant to extracting seed
- following organisational policies and procedures relevant to extracting seed
- applying seed extraction and storage techniques in line with work order instructions and within prescribed organisational tolerances
- operating, cleaning and maintaining seed extraction units and equipment
- recording seed species information and extraction results, and maintaining workplace information

Context of and specific resources for assessment

- Competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of required knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to follow relevant regulatory or Australian Standards requirements
- The following resources should be made available:
 - workplace location or simulated workplace
 - materials and equipment relevant to undertaking work applicable to this unit
 - specifications and work instructions

EVIDENCE GUIDE

Method of assessment

- Assessment must satisfy the endorsed Assessment Guidelines of the FPI11 Training Package
- Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of required knowledge
- Assessment must be by direct observation of tasks, with questioning on required knowledge and it must also reinforce the integration of employability skills
- Assessment methods must confirm the ability to access and correctly interpret and apply the required knowledge
- Assessment may be applied under project-related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency
- The assessment environment should not disadvantage the candidate
- Assessment practices should take into account any relevant language or cultural issues related to Aboriginality, gender or language backgrounds other than English
- Where the participant has a disability, reasonable adjustment may be applied during assessment
- Language and literacy demands of the assessment task should not be higher than those of the work role

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

RANGE STATEMENT

OHS requirements:

are to be in line with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include:

- personal protective equipment and clothing
- safety equipment
- first aid equipment
- fire fighting equipment
- hazard and risk control
- fatigue management
- elimination of hazardous materials and substances
- safe forest practices, including required actions relating to forest fire
- manual handling including shifting, lifting and carrying

Environmental requirements
may include:

- legislation
- organisational policies and procedures
- workplace practices

Legislative requirements:

are to be in line with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice and may include:

- award and enterprise agreements
- industrial relations
- Australian Standards
- confidentiality and privacy
- OHS
- the environment
- equal opportunity
- anti-discrimination
- relevant industry codes of practice
- duty of care

Organisational requirements
may include:

- legal
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- quality assurance
- procedural manuals
- quality and continuous improvement

RANGE STATEMENT

	processes and standards • OHS, emergency and evacuation procedures • ethical standards • recording and reporting requirements • equipment use, maintenance and storage requirements • environmental management requirements (waste minimisation and disposal, recycling and re-use guidelines)
Seed may include:	• native species • non-native species
Work order is to include:	• information and instructions on material to be extracted • site seed extraction requirements
	and may also include: • instructions for the environmental monitoring of work and procedures • environmental care requirements relevant to the work
Appropriate personnel may include:	• supervisors • suppliers • clients • colleagues • managers
Weight may include:	• properly calibrating and maintaining scales • using scales for weighing under licence from the weights and measures authority
Identifiers may include:	• alphanumeric • bar codes • colour codes • symbols
Conditions	for storage of material must be free of humidity or wetness to protect against incidence of fungus
Communication may include:	• verbal and non-verbal language • constructive feedback • active listening • questioning to clarify and confirm understanding • use of positive, confident and cooperative language

RANGE STATEMENT

Extraction units and equipment may include:	• use of language and concepts appropriate to individual social and cultural differences • control of tone of voice • kilns operated by gas, solar energy, oil or electricity • sieves of various sizes • air-drying racks and trays • lifting devices, such as overhead gantry, fork lift and conveyor belt • electronic and manual scales
Systems may include:	• electronic • manual
Seed information includes	details of: • species • weight • place or origin • container identifier
Packaging must:	• ensure protection of seeds • maintain traceability to collection source
Records and reports may include:	• seed species information • seed extraction processes and results • storage procedures
	and may be: • manual • a computer-based system • other appropriate organisational communication system

Unit Sector(s)

Not Applicable

Competency field

Competency field Forest Growing and Management