



Australian Government

FDFWGG3013A Operate spreading and seeding equipment

Release: 2

FDFWGG3013A Operate spreading and seeding equipment

Modification History

This unit supersedes and is equivalent to FDFWGGSEB Operate spreading and seeding equipment.

April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This specialist unit has been developed for the wine grape growing stream of the wine sector. It covers the skills and knowledge required to operate spreading and seeding equipment.
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Application of the Unit

Application of the unit	This unit applies to the operation of spreading and seeding equipment used in wine grape growing. It includes the ability to attach, set up and detach equipment as required. The equipment only includes that which requires calibration. Spreading and seeding activities may include planting cover crops, deep incorporation of ameliorants and fertilising.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	AHCMOM202 A	Operate tractors

Employability Skills Information

Employability skills	This unit contains employability skills.
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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. Prepare equipment for operation	1.1 Requirements are interpreted and confirmed 1.2 Materials are confirmed as available to meet requirements 1.3 Materials are prepared to meet requirements 1.4 Equipment is checked to confirm readiness for use 1.5 Equipment is attached and set up to meet application requirements
2. Operate equipment	2.1 Equipment is started up according to workplace procedures 2.2 Equipment is operated according to workplace procedures 2.3 Equipment performance is monitored to confirm performance is maintained within specification 2.4 Out-of-specification equipment performance is identified, rectified and/or reported 2.5 Materials are applied according to instructions 2.6 Problems and anomalies are recognised, rectified and/or reported
3. Shut down equipment	3.1 Equipment is shut down according to workplace procedures 3.2 Equipment is cleaned and stored according to workplace procedures 3.3 Waste generated by the process is collected, treated, disposed of or recycled according to workplace procedure 3.4 Work is conducted in accordance with workplace environmental guidelines
4. Record information	4.1 Workplace information is recorded in the appropriate format

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- access and interpret workplace information to identify seeding and spreading requirements
- select, fit and use appropriate personal protective clothing and/or equipment
- liaise with other work areas
- select appropriate equipment for the task
- confirm equipment status and condition. This may include checking:
 - belts and chains
 - lubricants
 - hydraulics
 - air intake
 - tyre pressure and wear
 - wear and tear
- attach, set up and calibrate equipment to meet application requirements
- select, prepare and load materials according to requirements
- start up equipment
- operate equipment to meet operating instructions. This should include:
 - driving forward and reversing
 - operating in confined spaces
 - operating amongst other vineyard activities and a variety of conditions as required
- monitor equipment performance and application rates. This may include monitoring:
 - status and condition
 - handling and stopping
 - ground speed
 - actual versus expected usage of materials
 - ground coverage
 - blockages
 - environmental operating conditions
- apply materials according to instructions. This may include:
 - correct variety or type of seed and/or fertiliser
 - correct soil ameliorant and/or treatment
 - application rate
 - volume
 - application depth

- density
- coverage
- recognise equipment performance problems and amend and/or report as instructed
- handle hazardous materials according to occupational health and safety (OHS) requirements
- shut down equipment in response to an emergency situation
- shut down equipment in response to routine shutdown requirements
- collect, sort, treat, dispose of and/or recycle waste
- identify, rectify and/or report environmental non-compliance
- clean equipment
- prepare equipment for storage
- store equipment according to workplace standards
- maintain work area to meet housekeeping standards
- maintain workplace records
- conduct routine maintenance of equipment according to enterprise procedures
- use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce.

Required knowledge includes:

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- the purpose and application of spreading and seeding operations within the vineyard growing system. This may include the purpose and application of:
 - soil ameliorants (e.g. pH, texture, and mulching treatments, e.g. structure)
 - inter-row cropping species and varieties
 - inter-row cropping practices and techniques
 - inorganic and organic fertilising materials
- process specifications, procedures and operating parameters
- purpose and operation of equipment and instrumentation components
- common causes of variation and corrective action required
- required weather conditions for activity
- soil characteristics as they apply to spreading and seeding operations. These may include:
 - structure
 - compaction
 - condition
 - texture
 - fertility and toxicity
 - moisture (e.g. too dry or waterlogged)
- significance and methods of monitoring equipment performance

- OHS hazards and controls
- material handling requirements
- lock-out and tag-out procedures
- procedures and responsibility for reporting problems
- reporting and recording requirements and procedures
- environmental issues and controls
- cleaning requirements and procedures associated with changeovers and types of shutdowns
- storage requirements associated with temporary or seasonal breaks in activity
- storage procedures for equipment and materials
- shutdown sequence
- routine maintenance procedures for equipment where relevant.

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

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

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

Evidence of ability to:

- use personal protective clothing and equipment
- confirm availability of specified materials and prepare according to instructions
- select and confirm status and suitability of equipment
- attach, set up and calibrate equipment to meet application requirements
- start and operate equipment in accordance with operation instructions and requirements of workplace and task
- monitor spreading or seeding operation to achieve specified result
- perform emergency and routine shutdowns
- take corrective action in response to out-of-specification results or non-compliance
- demonstrate knowledge of ohs hazards, controls and emergency procedures
- sort, collect, treat, recycle or dispose of waste
- record information appropriately.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- personal protective clothing and equipment as required
- work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements
- instructions, information, specifications and schedules as required
- equipment, services and corresponding information as required
- products and materials as required

EVIDENCE GUIDE	
	• internal and external customers and suppliers as required • cleaning procedures, materials and equipment as required • documentation and recording requirements and procedures.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

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.	
Policies and procedures	Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements
Workplace information	Workplace information can include: • Standard Operating Procedures (SOPs) • specifications • production schedules • instructions • routine maintenance schedules • work notes • Material Safety Data Sheets (MSDS) • manufacturer instructions • verbal direction from manager, supervisor or senior operator

RANGE STATEMENT	
Spreading and seeding activities	Spreading and seeding activities may include: • planting cover crops • deep incorporation of ameliorants and fertilising
Equipment	Equipment may include: • seeders • spreaders (e.g. fertiliser and mulch)
Terrain	Terrain must enable safe and effective operation of equipment. It may include: • tracks • access roads • vineyard rows • open paddocks • flat, undulating, steep, hilly or terraced land • on- and off road environments
Conditions	Conditions must enable safe and effective operation of equipment. These may include: • dry • wet • slippery • boggy • icy • foggy • windy • day and night conditions
Loads	Loads, where applicable, may range from: • full to empty as required
Confirming equipment status	Confirming equipment status involves: • checking that all safety standards and pre-start requirements are met and equipment is operational • checking the operation and calibration of measuring instrumentation
Information systems	Information systems may be: • print or screen based
Materials	Materials may include: • organic and inorganic fertilisers

RANGE STATEMENT	
	• gypsum • lime • seed • ameliorants (e.g. grape marc) • mulch (e.g. straw)
Waste	Waste may include: • empty containers • bags • packaging materials • unused materials
Problems and anomalies	Problems and anomalies may include: • equipment blockages • uneven surfaces • size and flow of materials being applied
Work hazards	Work may involve exposure to: • chemical, dangerous or hazardous substances

Unit Sector(s)

Unit sector	Wine operations
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Custom Content Section

Not applicable.