



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FDFWGG3003A Coordinate crop harvesting activities**

**Release: 2**

## FDFWGG3003A Coordinate crop harvesting activities

### Modification History

This unit supersedes and is equivalent to FDFWGGCHAB Coordinate crop harvesting activities.

April 2012: Minor typographical corrections.

### Unit Descriptor

|                        |                                                                                                                                                                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Unit descriptor</b> | This specialist unit has been developed for the wine grape growing stream of the wine sector. It covers the skills and knowledge required to lead a team of hand pickers, including transporters, to implement a hand picking schedule. |
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### Application of the Unit

|                                |                                                                                                |
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| <b>Application of the unit</b> | Coordination skills required in the application of this unit will involve facilitating others. |
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

|                           |             |                     |
|---------------------------|-------------|---------------------|
| <b>Prerequisite units</b> |             |                     |
|                           | FDFWGG2024A | Pick grapes by hand |

## Employability Skills Information

|                             |                                          |
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| <b>Employability skills</b> | 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 for hand picking activities  | 1.1 Picking requirements are identified<br>1.2 Equipment is confirmed as available and ready for use<br>1.3 Pickers and transporter are instructed as required                                                                                                                                                                                                                                                                                                                        |
| 2. Implement grape picking requirements | 2.1 Picking activities are monitored to confirm performance is maintained within specifications<br>2.2 Out-of-specification performance is identified, rectified and/or reported<br>2.3 Equipment is maintained in good working order<br>2.4 Grapes are harvested according to crop level and quality and workplace procedures<br>2.5 Anomalies and problems are identified, corrected and/or reported<br>2.6 Work is conducted in accordance with workplace environmental guidelines |
| 3. Transfer grapes to receival point    | 3.1 Chemicals are added to grapes according to requirements<br>3.2 Grapes are delivered to receival point according to instructions                                                                                                                                                                                                                                                                                                                                                   |
| 4. Complete hand picking operations     | 4.3 Pickers are debriefed as appropriate                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5. Record information                   | 5.1 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:

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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 workplace information to identify harvesting requirements (e.g. block, variety and quality)
- liaise with other work areas (e.g. winery)
- select, fit and use appropriate personal protective clothing and/or equipment
- identify, rectify and/or report environmental non-compliance
- implement grape picking activities. This may include consideration of:
  - equipment and materials required
  - location
  - transport
  - timing
  - environmental conditions
  - other vineyard activity
  - quality and quantity requirements
- monitor harvesting activities. This will include:
  - team efficiencies and safe working practices
  - grape quality
  - equipment operation
  - weather
  - actual versus required production
  - cleaning and storage of equipment
  - collection and disposal of waste
  - problems and anomalies
- take corrective action in response to out-of-specification results or non-compliance
- report and/or record corrective action or non-compliance
- supervise and motivate a team of pickers to achieve production goals
- resolve conflicts as required
- instruct a team of pickers to achieve desired outcomes. This may include:
  - picking techniques
  - quality parameters
  - production requirements
  - occupational health and safety (OHS) hazards and precautions
  - working arrangements

- handle and add chemicals according to instructions as required
- take the necessary action to protect fruit quality where possible. This may include removal of matter other than grape (MOG)
- deliver fruit to receival point according to instructions. This may involve the supervision of transport operators
- facilitate and train teams and individuals
- complete any necessary workplace records
- conduct routine maintenance of equipment according to enterprise procedures
- operate information technology systems according to enterprise procedures.

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**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:**

- effect of different climatic conditions on timing and management of harvest
- factors that affect grape ripening (e.g. canopy management, irrigation, grape variety and climatic conditions)
- factors that affect fruit and wine quality, including:
  - oxidation
  - temperature
  - MOG
- basic vine physiology, as it applies to:
  - water intake
  - nutrient uptake
  - photosynthesis
  - respiration, transpiration
  - translocation
- parts of the root, trunk, shoot and fruit systems of the grapevine, their role in how the vine works and their contribution to fruit quality, including:
  - buds, nodes and tendrils
  - cambium, epidermis, phloem and xylem
  - leaf blade, bract and petiole
  - bunch, berries and flowers
- vine types, their characteristics and uses, including:
  - family, genus and species
  - *Vitis vinifera* and commercial varieties
  - native species and hybrids (e.g. *labrusca*)
  - rootstocks and scion stock
- industry processes for new variety development
- annual grapevine growth stages, including:
  - budburst

- flowering
- veraison
- maturity
- key grape varieties and their distinguishing features. This may include factors, such as:
  - berry and bunch characteristics
  - frost and disease resistance
  - flavour and style
- affect of fruit quality on wine
- quality assurance procedures and controls
- common problems and anomalies
- harvesting procedures and operating parameters. This may include picking grapes by hand, transporting grapes to the receival point and chemical treatment
- significance and method of monitoring team and equipment performance
- common faults and corrective action required
- OHS hazards and controls
- environmental issues and controls
- procedures and responsibility for reporting problems
- cleaning requirements associated with changeovers
- team facilitation and training techniques
- handling conflicts
- cleaning procedures
- routine maintenance procedures for equipment where relevant
- information technology systems 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 | <p>Evidence of ability to:</p> <ul style="list-style-type: none"> <li>• use personal protective clothing and equipment</li> <li>• determine requirements for crop harvesting according to crop level and quality</li> <li>• select harvesting techniques</li> <li>• coordinate activities to implement determined harvesting techniques</li> <li>• address problems and anomalies</li> <li>• complete workplace records.</li> </ul>                                                                                                                                                                                                                                                                                                                                       |
| Context of and specific resources for assessment                                             | <p>Assessment must occur in a real or simulated workplace where the assessee has access to:</p> <ul style="list-style-type: none"> <li>• personal protective clothing and equipment as required</li> <li>• work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements</li> <li>• instructions, information, specifications and schedules as required</li> <li>• equipment, services and corresponding information as required</li> <li>• products and materials as required</li> <li>• internal and external customers and suppliers as required</li> <li>• cleaning procedures, materials and equipment as required</li> <li>• documentation and recording requirements and procedures.</li> </ul> |
| Method of assessment                                                                         | This unit should be assessed together with other units of competency relevant to the function or work role.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

**EVIDENCE GUIDE****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
- picking schedules
- instructions
- routine maintenance schedules
- work notes
- Material Safety Data Sheets (MSDS)
- manufacturer instructions
- verbal direction from manager, supervisor or senior operator

**Equipment**

Equipment may include:

- tractors
- trailers
- gondolas
- grape bins
- forklift
- snips
- knives

| <b>RANGE STATEMENT</b>        |                                                                                                                                                                                                                                                                                                           |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <ul style="list-style-type: none"> <li>• gloves</li> <li>• bags</li> <li>• fruit containers</li> <li>• buckets</li> <li>• fruit bins</li> <li>• team support equipment (e.g. toilet facilities, first aid box, water and spare equipment)</li> </ul>                                                      |
| <b>Problems and anomalies</b> | <p>Problems and anomalies may include:</p> <ul style="list-style-type: none"> <li>• rotten, diseased, immature or over-ripe grapes</li> <li>• equipment malfunction</li> <li>• team performance</li> </ul>                                                                                                |
| <b>Work requirements</b>      | <p>Work requirements may include:</p> <ul style="list-style-type: none"> <li>• specification of block</li> <li>• variety</li> <li>• quality</li> <li>• timing</li> <li>• tonnage</li> <li>• speed</li> <li>• treatment</li> </ul>                                                                         |
| <b>Information systems</b>    | <p>Information systems may be:</p> <ul style="list-style-type: none"> <li>• print or screen based and may include information technology systems, such as email and fax communication, baumé testing equipment, weather forecasting, rainfall mapping systems, reporting and recording systems</li> </ul> |
| <b>Work hazards</b>           | <p>Work may involve exposure to:</p> <ul style="list-style-type: none"> <li>• chemical, dangerous or hazardous substances</li> </ul>                                                                                                                                                                      |
| <b>Grapes</b>                 | <p>Grapes may vary according to:</p> <ul style="list-style-type: none"> <li>• grape variety</li> <li>• crop quality</li> <li>• quantity</li> <li>• trellis systems</li> <li>• collection procedures</li> </ul>                                                                                            |
| <b>Team members</b>           | <p>Team members may include:</p> <ul style="list-style-type: none"> <li>• people from a range of social, cultural and ethnic backgrounds and physical and mental abilities</li> </ul>                                                                                                                     |

**Unit Sector(s)**

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| <b>Application of the unit</b> | Coordination skills required in the application of this unit will involve facilitating others. |
|--------------------------------|------------------------------------------------------------------------------------------------|