



Australian Government

Department of Education, Employment and Workplace Relations

FDFWGG2011A Install irrigation components

Release: 2

FDFWGG2011A Install irrigation components

Modification History

This unit supersedes and is equivalent to FDFWGGICB Install irrigation components.
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 This unit covers the skills and knowledge required to install vineyard irrigation components under supervision.
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Application of the Unit

Application of the unit	This unit applies to the installation of irrigation components designed to irrigate vines.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

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 for installation of irrigation components	1.1 Equipment is checked to confirm readiness for use 1.2 Materials are selected according to instructions 1.3 Irrigation components are laid out in accordance with instructions 1.4 Trenches are dug or tidied up in accordance with instructions where required
2. Install irrigation components	2.1 Pipeline is joined or finished according to instructions 2.2 Components are added or inserted according to instructions 2.3 Lines are positioned and secured according to instructions 2.4 Problems and anomalies are recognised and reported
3. Complete installation activities	3.1 Equipment is cleaned and stored according to instructions 3.2 Materials are stored according to instructions 3.3 Waste is collected and disposed of or recycled according to workplace procedures 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 workplace information to identify installation requirements
- select, fit and use appropriate personal protective clothing and/or equipment
- check equipment is ready for use
- select appropriate materials
- lay out irrigation components according to instructions. This may include:
 - spacing
 - type, specification
 - numbers
 - positioning
 - safe handling procedures
- dig trenches according to instructions. This is likely to be tidying up after a mechanical digger and would include:
 - depth
 - slope
 - removal of anything that may damage irrigation pipes or affect flow
- operate equipment according to instructions
- join or finish pipeline according to instructions. This may include:
 - gluing and sealing
 - tying off ends
 - changing pipe sizes
 - T joins
 - elbows
- add or insert components according to instructions. This includes:
 - spacing
 - fitting specifications
 - fixing method
- position and secure lines according to instructions. This may include:
 - height
 - frequency and quality of ties
 - tying off ends
 - consideration of anything that may damage or affect performance of the irrigation system
- recognise, rectify and/or report problems and anomalies with component installation

- identify, rectify and/or report environmental non-compliance
- collect, sort, treat, dispose of and/or recycle waste
- clean and store equipment according to instructions
- use appropriate cleaning techniques
- store unused materials
- maintain work area to meet housekeeping standards
- 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:

- purpose, features and components of the irrigation system
- irrigation installation process and procedures
- common faults, problems and how to solve them
- safe handling of materials and equipment
- purpose and application of personal protective clothing and/or equipment
- Occupational health and safety (OHS) hazards and controls
- environmental issues and controls
- procedures and responsibility for reporting problems and anomalies
- cleaning and storage requirements of equipment
- storage requirements of materials.

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 where required • carry out irrigation installation according to instructions • lay out lines according to instructions • collect and recycle or dispose of waste according to procedures.
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 • 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

EVIDENCE GUIDE

	a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.
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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 and instructions
- work notes
- manufacturer instructions
- verbal direction from manager, supervisor or senior operator

Equipment

Equipment may include:

- trenching equipment
- shovels
- mole grips
- hand tools

Materials

Materials may include:

- pipe
- glue
- tape
- joiners
- elbows
- T pieces

RANGE STATEMENT	
	• other irrigation parts
Irrigation components	Irrigation components include: • drippers • joiners • pipelines • drip lines • sprinklers • filters • microjets • pumps • furrows • valves
Irrigation systems	Irrigation systems may include: • flood • dripper • overhead • water winch
Waste	Waste may include: • pipe lengths • broken or faulty components

Unit Sector(s)

Application of the unit	This unit applies to the installation of irrigation components designed to irrigate vines.
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