

Modification history

Release	Comments
Release 3	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0.
Release 2	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 2.0.
Release 1	This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0.

AHCIRG331	Install pressurised irrigation systems
Application	<p>This unit of competency describes the skills and knowledge required to organise resources, set out and prepare irrigation installation site and install, commission and complete pressurised irrigation system installation.</p> <p>The unit applies to individuals who install pressurised irrigation systems under broad direction and take responsibility for their own work.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Prerequisite Unit	Nil
Unit Sector	Irrigation (IRG)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Organise resources for installation work	1.1 Confirm activity to be undertaken, including identifying potential hazards and risks and implementing safe working practices to manage risks 1.2 Select required materials, tools, equipment and machinery and check for safe operation 1.3 Check that parts and equipment match system drawings and specifications 1.4 Select, fit, use and maintain safety and personal protective equipment applicable to the task 1.5 Carry out pre-operational checks on tools, equipment and machinery 1.6 Identify environmental considerations of irrigation installation activities 1.7 Check water supply to ensure that it is compatible with system specifications
2. Set out and prepare site	2.1 Measure and mark out irrigation lines 2.2 Confirm trenches are at the specified depth without damage to services, facilities, features and established plants 2.3 Observe regulations relevant to the situation 2.4 Use work practices that reflect sustainable horticulture principles and respond to local community requirements
3. Install irrigation components	3.1 Interpret the irrigation system plan and, where applicable, supervise contractors and monitor work to ensure it conforms to the plan 3.2 Assemble and connect components and complete and test joints 3.3 Fit and adjust fittings and valves and secure all joints 3.4 Maintain a clean and safe work area while installation work is carried out
4. Commission irrigation system	4.1 Calibrate testing and monitoring equipment 4.2 Confirm start-up sequence according to operations manual 4.3 Flush system as required 4.4 Identify operating faults and take corrective where required 4.5 Record work outcomes and report to supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Complete installation work	5.1 Finish off earthworks 5.2 Confirm system configuration and capacity matches installation plan 5.3 Restore site and clear materials and equipment from the site on completion of maintenance works 5.4 Clean and store tools and equipment

DRAFT

Foundation Skills	
<i>This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.</i>	
Skill	Description
Reading	<ul style="list-style-type: none"> Interpret textual information from a range of sources to identify relevant and key information about workplace operations
Writing	<ul style="list-style-type: none"> Document irrigation installation activities
Oral communication	<ul style="list-style-type: none"> Use clear language to report irrigation installation activities
Numeracy skills	<ul style="list-style-type: none"> Measure irrigation lines and trenches Confirm part numbers
Navigate the world of work	<ul style="list-style-type: none"> Recognise and follow workplace requirements, including safety requirements, associated with own role and area of responsibility

Unit Mapping Information			
Code and title current version	Code and title previous version	Comments	Equivalence status
AHCIRG331 Install pressurised irrigation systems Release 3	AHCIRG331 Install pressurised irrigation systems Release 2	Minor changes to performance criteria and foundation skills	Equivalent unit

Links
Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72

TITLE	Assessment requirements for AHCIRG331 Install pressurised irrigation systems
Performance Evidence	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has installed pressurised irrigation systems on at least one occasion and has:</p> <ul style="list-style-type: none"> • calibrated testing and monitoring equipment • commissioned irrigation system • completed installation work • organised resources for installation work • set out and prepared the site. 	
Knowledge Evidence	
<p>An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:</p> <ul style="list-style-type: none"> • the behaviour of water on varying terrain and soil types • calculations for installing pressurised irrigation systems • characteristics and operation of joints, valves and sprinkler components • components of a pressurised irrigation system • methods and techniques of installing pressurised irrigation • operation of pumps and water flow rates • soil characteristics • soil water retention testing techniques • water quality and water filtration techniques. 	
Assessment Conditions	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> • physical conditions: <ul style="list-style-type: none"> • a workplace setting or an environment that accurately represents workplace conditions • resources, equipment and materials: <ul style="list-style-type: none"> • work instructions and workplace procedures applicable to installing pressurised irrigation systems • pressurised irrigation system operation and maintenance manual • pressurised irrigation system installation equipment • pressurised irrigation system installation tools and equipment and procedures • personal protective equipment applicable to installing pressurised irrigation systems • specifications: <ul style="list-style-type: none"> • recording procedures • relationships: <ul style="list-style-type: none"> • supervisor • timeframes: <ul style="list-style-type: none"> • according to job requirements. <p>Assessors of this unit must satisfy the requirements of assessors in applicable vocational education and training legislation, frameworks and/or standards.</p>	
Links	<p>Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72</p>