



**Australian Government**

# **Assessment Requirements for AHCIRG442 Supervise irrigation system installation**

**Release: 1**

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## Modification History

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

## Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has supervised an irrigation system installation on at least one occasion and has:

- implemented employment procedures
- conducted work health and safety risk assessment
- developed irrigation system construction and installation procedures
- interpreted irrigation designs
- supervised installation tasks including:
  - assembling sprinklers, pressure regulators and hose directors
  - checking operating specifications for pressures and flow rates
  - completing installation work and testing components
  - installing irrigation components
  - installing power and pumping plant
  - laying and joining sprinkler lateral pipelines
  - laying and joining supply and distribution pipeline
  - pressure testing the system
  - setting out and preparing site
  - setting up irrigation controllers
  - undertaking start-up procedures
- developed irrigation system operating procedures.

## Knowledge Evidence

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:

- employment procedures
- project management principles

- safe work practices for construction
- design interpretation
- volume and pressure requirements
- water quality and water filtration techniques
- behaviour of water on varying terrain and soil types
- calculations for installing low volume irrigation systems
- operating specifications for pressures and flow rates
- pump capacity
- types of pumps and water flow rates
- licensing requirements for electrical work
- equipment and machinery operation and maintenance manual
- principles and practices of irrigation system installation supervision
- characteristics and operation of joints, valves and sprinkler components
- setting up fertigation equipment
- distribution uniformity
- start-up procedures
- setting up irrigation controllers
- commissioning procedures
- soil water retention testing techniques.

## Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
  - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - irrigation system testing and monitoring equipment and manual specifications:
  - workplace procedures applicable to health and safety in the workplace, environment and irrigation system installation
- relationships
  - client, authorities and agencies
- timeframes:
  - according to the job requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

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