



**Australian Government**

# **Assessment Requirements for AHCIRG344 Implement an irrigation schedule**

**Release: 1**

# Assessment Requirements for AHCIRG344 Implement an irrigation schedule

## Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and 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 implemented an irrigation schedule on at least one occasion and has:

- applied workplace health and safety requirements
- selected tools and equipment appropriate to the scope of works
- accessed and interpreted the information in an irrigation schedule
- compared plant health and growth to benchmark requirements
- consulted with appropriate senior personnel or consultants
- instructed irrigation system operators
- implemented the irrigation schedule including consideration of:
  - application rates
  - interaction between different irrigation employees or shifts
  - maintenance programs and supplies
  - materials, chemicals, services
  - resources, including operators with appropriate skills
  - timing and length
- liaised with other work areas
- identified irrigation requirements throughout the growing season by monitoring:
  - climatic conditions
  - crop stage and requirements if applicable
  - effective root depth
  - frost risk
  - plant varietal characteristics and requirements
  - signs of plant nutrient deficiencies
  - soil moisture levels
  - soil type and depth
  - symptoms of water stress

- water quality
- water table level
- monitored irrigation activities, including:
  - environmental impact of irrigation activities
  - identified emitter output consistency
  - identified soil moisture content and depth to which water will reach
  - reported and recorded problems and corrective action taken
  - taken corrective action in response to out-of-specification results or non-compliance
- applied sampling techniques
- conducted soil moisture tests
- identified, rectified and reported environmental non-compliance.

## 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:

- workplace requirements applicable to health and safety in the workplace for implementing an irrigation schedule
- resource requirements and availability
- irrigation strategies
- principles of soil moisture monitoring, including:
  - volumetric soil moisture content
  - percentage compared to soil moisture tension
- consultation requirements and procedures
- effect of irrigation techniques on plant growth
- visual symptoms of plant nutrient deficiencies, water stress and frost
- recording requirements and procedures
- sampling techniques and procedures
- testing techniques and procedures
- interpretation of routine soil moisture tests
- environmental impacts, hazards and controls for irrigation
- water budgeting tools.

## 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 equipment operation and maintenance manual
  - irrigation equipment

- soil and water sampling equipment
- personal protective equipment applicable to implementing an irrigation schedule
- specifications:
  - work instructions and workplace procedures applicable to implementing an irrigation schedule
  - irrigation technology tools and equipment and procedures
  - workplace requirements applicable to health and safety in the workplace and implementing and irrigation schedule
  - soil and water testing equipment and procedures
  - recording procedures
- relationships:
  - personnel
- timeframes:
  - according to job requirements.

Assessors of this unit must satisfy the requirements of 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>