



Australian Government

Assessment Requirements for AHCIRG422 Manage a moving sprinkler irrigation system

Release: 1

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Modification History

Release Number	TP Version	Comments
1	AHCv1.0	Initial release

Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- develop and supervise procedures for starting up, carrying out operational checks and shutting down
- measure, interpret and adjust flow rates and pressures
- measure output and efficiency of an irrigation system
- monitor system effectiveness:
- application rates
- depth of irrigation
- infiltration and runoff
- irrigation times
- pressure variations and blockages
- salinity levels and water quality
- soil moisture levels
- sprinkler coverage and output
- use records to review an irrigation system

Knowledge Evidence

The candidate must demonstrate knowledge of:

- best practices for reducing environmental impacts of irrigation
- component specifications
- critical measures for moisture availability:
- field capacity
- readily available water
- wilting point
- energy efficiency indicators/ benchmarks for moving sprinkler irrigation:

- Application Efficiency
- Average Application Rate
- Instantaneous Application Rate
- environmental hazards of runoff and compaction
- environmental impacts of irrigation using water from any ground or underground source
- general irrigation methods for moving sprinkler systems
- irrigation schedules
- main components of moving sprinkler irrigation systems
- monitoring soil compaction and drainage
- moving sprinkler irrigation technologies
- physical soil characteristics such as infiltration rate, water holding capacity and wetted volume in the root zone
- pump types used in moving sprinkler irrigation systems and their output and efficiency ratings
- pump types used in moving sprinkler irrigation systems and their operation
- servicing and maintenance of travelling mechanism
- soil moisture testing techniques
- soil, plant and water relationships
- water requirements of plants/crops consistent with sound environmental management

Assessment Conditions

Assessors must satisfy current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>