



Australian Government

AHCIRG501 Audit irrigation systems

Release: 1

AHCIRG501 Audit irrigation systems

Modification History

Release Number	TP Version	Comments
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to audit an irrigation system.

It applies to individuals who analyse information and exercise judgement to complete a range of skilled activities and demonstrate deep knowledge in a specific technical area. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems. All work is carried out to comply with workplace procedures.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Irrigation (IRG)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Collect and collate all available data	1.1 Collate data on system performance 1.2 Collate data on environmental and workplace health and safety issues 1.3 Collate data on equipment supply and usage 1.4 Collate data on crop production 1.5 Collate data on water use and quality 1.6 Collate data on climatic trends 1.7 Collate data on physical and chemical properties of soil

Element	Performance criteria
2. Assess actual data against benchmarks, specifications and predictions	2.1 Analyse system performance and compare with system specifications and performance predictions 2.2 Analyse supply and stock use and compare with previous and estimated usage and costs 2.3 Analyse crop production and compare with previous and predicted production 2.4 Analyse water usage and quality and compare with past and predicted usage and quality 2.5 Analyse climatic information and compare with predicted trends 2.6 Analyse soil properties and compare with previous and predicted properties 2.7 Analyse production costs related to irrigation system and compare with previous and predicted costs 2.8 Analyse net profits and compare with past and predicted profits
3. Compile a report of system evaluation	3.1 Examine indicators of good performance 3.2 Examine indicators of poor performance 3.3 Examine causes of deviations from performance specifications and requirements 3.4 Prepare a report that includes discussion of results of data analysis and conclusions reached on irrigation system performance in relation to crop production and business performance
4. Recommend alterations to achieve performance improvement	4.1 Make recommendations to modify or eliminate causes of poor performance, or to enhance current performance

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCIRG501A Audit irrigation systems.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for AHCIRG501 Audit irrigation systems

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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:

- analyse and organise data
- identify adverse environmental impacts of irrigation system activities and recommend appropriate remedial action
- recommend relevant work health and safety and environmental procedures
- solve performance problems and recommend solutions
- use computer software for irrigation auditing

Knowledge Evidence

The candidate must demonstrate knowledge of:

- environmental impacts of irrigation systems using water from any ground or underground source
- evaluation procedures
- irrigation system performance indicators
- relevant workplace health and safety legislation, codes of practice and enterprise requirements
- statistical data analysis procedures or software

Assessment Conditions

Assessors must satisfy current standards for RTOs.

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