



Australian Government

AHCIRG432 Supervise irrigation system maintenance

Release: 1

AHCIRG432 Supervise irrigation system maintenance

Modification History

Release Number	TP Version	Comments
1	AHCv1.0	Initial release

Application

This unit of competency covers the skills and knowledge required to supervise irrigation maintenance work.

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. Develop a maintenance program for an irrigation system	1.1 Establish the maintenance requirements for irrigation components and structures 1.2 Establish the maintenance requirements for the irrigation site 1.3 Determine the frequency of maintenance activities required and develop a schedule 1.4 Calculate the costs of maintenance activities in terms of required staff, materials and equipment 1.5 Assess the work health and safety risks associated with the

Element	Performance criteria
	maintenance program and implement suitable controls 1.6 Minimise the environmental impacts of maintenance activities 1.7 Develop a system for reporting maintenance activities
2. Supervise maintenance of irrigation components	2.1 Develop maintenance checklists for irrigation components 2.2 Monitor component operation, identify operating faults and take appropriate action 2.3 Identify and investigate abnormal operation or frequent and recurring breakdowns and organise maintenance as required 2.4 Identify situations requiring expert advice seek and specialist assistance 2.5 Review equipment condition routinely to ensure and maintain efficient operations
3. Carry out maintenance of testing equipment	3.1 Perform preventative maintenance 3.2 Identify and report equipment wear and faults 3.3 Perform minor repairs within limits of authorisation 3.4 Replace defective parts and make adjustments 3.5 Seek expert help where difficulties are encountered 3.6 Update maintenance and calibration records
4. Supervise pest and weed control in an irrigated area	4.1 Assess evidence of pests and determine species of infestation 4.2 Locate areas of weed infestation, which may be reduced or eradicated and identify species 4.3 Select integrated control methods for pests and weeds 4.4 Schedule control methods at the optimum time that will have minimal damage to the crop 4.5 Maintain records of the severity of infestations and treatments
5. Complete records of irrigation system maintenance	5.1 Maintain records of maintenance activities 5.2 Assess the results of maintenance works against the maintenance program

Foundation Skills

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

Range of Conditions

Unit Mapping Information

New unit - no equivalent.

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 AHCIRG432 Supervise irrigation system maintenance

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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:

- carry out visual checks for blockages or signs of wear in components
- check connections and controllers
- check sprinkler output and function
- confirm operational pressures
- develop enterprise procedures for maintenance
- ensure proper operation of automatic flush valves
- inspect irrigation systems
- maintain testing equipment
- pressure testing systems
- service irrigation equipment
- test emitter output and function
- test irrigation equipment

Knowledge Evidence

The candidate must demonstrate knowledge of:

- principles and practices of irrigation system maintenance supervision
- develop enterprise procedures for pre-season, irrigation and post-season maintenance
- drainage systems
- environmental impacts of irrigation maintenance
- equipment testing
- system components
- system inspection
- operating pressures and output
- operational and maintenance requirements

- pre and post-season maintenance covering
- pressure testing as per procedures
- pumping and distribution systems
- distribution uniformity
- visual checks for blockages or signs of wear in components
- work health and safety hazards and safe work procedures

Assessment Conditions

Assessors must satisfy current standards for RTOs.

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