



**Australian Government**

# **AHCIRG346 Operate pressurised irrigation systems**

**Release: 1**

# AHCIRG346 Operate pressurised irrigation systems

## Modification History

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

## Application

This unit of competency describes the skills and knowledge required to pre-start check, inspect, start up, operate, monitor and shut down pressurised irrigation systems.

The unit applies to individuals who operate pressurised irrigation systems under broad direction and take responsibility for their own work.

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

## Pre-requisite Unit

Nil

## Unit Sector

Irrigation (IRG)

## Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Carry out pre-start checks	1.1 Confirm activity to be undertaken, including identifying potential hazards and risks and implementing safe working practices to manage risks 1.2 Select required tools and equipment and check for safe operation 1.3 Select, fit and use personal protective equipment applicable to the task 1.4 Check water, power, fuel and lubricants to confirm all are available and the control system is operational

<b>Elements</b>	<b>Performance Criteria</b>
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Prime pumps, if necessary, and open or close valves and controls as directed 1.6 Calibrate pressure and flow testing equipment 1.7 Carry out other pre-start system checks
2. Inspect and operate the system	2.1 Implement start up sequence according to operation and maintenance procedures 2.2 Check emitter spacing against the irrigation plan 2.3 Adjust water pressure as required 2.4 Clear and replace filters as required 2.5 Correct or repair all malfunctions, leaks and blockages and report
3. Monitor irrigation system performance	3.1 Check emitters for output 3.2 Calculate application rate of water 3.3 Check the water distribution pattern in the irrigated area 3.4 Monitor moisture levels in the root zone 3.5 Minimise environmental impacts of the operation
4. Shut down irrigation system	4.1 Apply water for sufficient time to achieve required soil moisture levels and allow for weather conditions 4.2 Shut down system components and drain 4.3 Record and report irrigation activities according to workplace recording procedures

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.*

<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Interpret textual information from a range of sources to identify relevant and key information about workplace operations</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Use the correct terminology to document irrigation activities</li> </ul>

Skill	Description
Oral communication	<ul style="list-style-type: none"> <li>Use clear language to report irrigation activities</li> </ul>
Navigate the world of work	<ul style="list-style-type: none"> <li>Recognise and follow workplace requirements, including safety requirements, associated with own role and area of responsibility</li> </ul>

## Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCIRG346 Operate pressurised irrigation systems	AHCIRG332 Operate pressurised irrigation systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

## Links

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