



Australian Government

AHCIRG408 Schedule irrigations

Release: 1

AHCIRG408 Schedule irrigations

Modification History

Release Number	TP Version	Comments
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to determine the timing and amount of each irrigation to meet crop or plant needs and environmental requirements.

It applies to individuals who analyse information and exercise judgement to complete a range of advanced 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. Monitor crop and plant water use	1.1 Estimate or measure water use from one or more systems 1.2 Accumulate water as a soil water deficit in the root zone
2. Apply a measured amount of water	2.1 Predict a pre-determined deficit using a scheduling system 2.2 Apply irrigation to partly or fully replace the deficit 2.3 Increase water quantities where appropriate to ensure dilution and transport of toxic solutes below the root zone

Element	Performance criteria
3. Assess efficacy of irrigation and repeat cycles of irrigation	3.1 Measure the effectiveness of irrigation application with in-field equipment 3.2 Adjust the estimated soil moisture level in scheduling system to match that measured 3.3 Recalibrate the scheduling system where necessary 3.4 Repeat cycles of irrigation until schedule is correctly established
4. Record irrigation and scheduling parameters	4.1 Record each irrigation and significant rainfall event, plus other appropriate parameters used in scheduling system 4.2 Estimate and record drainage amount below root zone at each irrigation 4.3 Record system performance data
5. Plan for extremes of weather	5.1 Modify estimated deficits to cater for any prolonged saturation following heavy rainfall 5.2 Alter shift areas, and where applicable, application rates, to suit appropriate irrigation schedules that minimise frost damage 5.3 Implement strategies involving prioritising of plants and crops and intermittent irrigation at times of extreme heat

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 AHCIRG408A Schedule irrigations.

Links

Companion Volume implementation guides are found in VETNet -

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