



Australian Government

NWPTRT028 Operate and control reclaimed water irrigation

Release: 1

NWPTRT028 Operate and control reclaimed water irrigation

Modification History

Release 1. This is the first release of this unit of competency in the NWP National Water Training Package.

Application

This unit involves the skills and knowledge required to operate and control reclaimed water irrigation.

It includes assessing sites for reclaimed water irrigation and quality of reclaimed water for irrigation. It also includes implementing reclaimed water irrigation, responding to water or soil quality issues and compiling reclaimed water irrigation records.

This unit applies to staff members with a specific responsibility for analysing the critical aspects of reclaimed water reuse management relating to a project or site and implementing reclaimed water reuse irrigation. Those undertaking this unit would work under appropriate supervision, performing routine tasks in a familiar context, and ensuring minimum damage to the environment.

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

Pre-requisite Unit

Not applicable.

Competency Field

Treatment

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

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|----------|-----------------------------------|------------|--|
| 1 | Assess sites for reclaimed | 1.1 | Identify soil and water interactions and soil properties |
|----------|-----------------------------------|------------|--|

water irrigation		important for plant growth
	1.2	Identify soil sampling sites, collect samples and conduct soil testing according to workplace procedures
	1.3	Classify soils using field texture, pH and structure analysis
	1.4	Monitor and determine the water holding capacity of soil
2	Assess quality of reclaimed water for irrigation	
	2.1	Sample and test reclaimed water and interpret quality parameters
	2.2	Determine crops suitable for the quality of reclaimed water and worksite conditions
3	Implement reclaimed water irrigation	
	3.1	Identify features of irrigation systems
	3.2	Operate and maintain irrigation equipment according to manufacturer instructions
	3.3	Identify and apply irrigation scheduling options for reclaimed water
	3.4	Produce water budgets using crop factors and climate data
	3.5	Apply irrigation water and collect and monitor tail water or runoff
4	Respond to water or soil quality issues	
	4.1	Develop irrigation management options to respond to water quality issues
	4.2	Identify and apply requirements and options for soil ameliorants
	4.3	Monitor infiltration and drainage
5	Compile reclaimed water irrigation records	
	5.1	Compile reports from system data according to workplace procedures
	5.2	Report observations outside defined parameters for further action to relevant personnel

Foundation Skills

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

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to NWPTRT062 Operate and control reclaimed water irrigation.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>

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