



Australian Government

AHCDRG308 Maintain and repair irrigation drainage systems

Release: 1

AHCDRG308 Maintain and repair irrigation drainage systems

Modification History

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

Application

This unit of competency describes the skills and knowledge required to access drainage lines, repair irrigation drainage systems, clear blockages and maintain drainage earthworks and equipment of irrigation drainage systems.

The unit applies to individuals who maintain and repair irrigation drainage 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

Drainage (DRG)

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. Prepare to carry out irrigation drainage system maintenance	1.1 Inspect site and assess drainage system 1.2 Confirm necessity for repair and notify appropriate people 1.3 Determine work requirements from plans, drawings, specifications or instructions 1.4 Identify potential hazards and assess risks and implement safe working practices to manage risks 1.5 Select required tools and equipment and check for safe operation

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.6 Select, fit and use personal protective equipment applicable to the task 1.7 Confirm excavation methods meet safety requirements of the task and site 1.8 Make appropriate drainage and inflow diversion arrangements 1.9 Minimise environmental impacts of irrigation drainage maintenance activities
2. Digging to access drainage lines	2.1 Access plan of irrigation system and locate access points 2.2 Gain access to drainage lines to allow blockage to be cleared 2.3 Carry out digging without unnecessary damage to buildings, site, environment or existing fixtures and fittings
3. Carry out repairs on an irrigation drainage system	3.1 Conduct routine inspections of designated work areas 3.2 Identify system faults and take corrective actions with consideration of structure type, location and specifications 3.3 Use mechanical equipment to open and close drains 3.4 Repair or replace components and associated fittings as required 3.5 Construct cast in situ components 3.6 Document irrigation drainage repair and maintenance activities
4. Clear blockages in an irrigation drainage system	4.1 Perform clearing blockages procedures 4.2 Test drainage lines to confirm blockages have been cleared from pipe system 4.3 Repair and reseal drainage lines to permit normal use 4.4 Clean and align work area and dispose of debris and waste
5. Maintain drainage earthworks and equipment and carry out vegetation clearing procedures	5.1 Confirm that earthworks and embankments meet system requirements 5.2 Manage and maintain drainage area vegetation 5.3 Control weeds within drainage area 5.4 Implement and record a maintenance program for drainage equipment

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.

Skill	Description
Reading	Interpret textual information from a range of sources to identify relevant and key information about workplace operations
Oral communication	Use clear language to notify appropriate people of repair works and report irrigation drainage repair and maintenance activities
Navigate the world of work	Recognise and follow workplace requirements, including safety requirements, associated with own role and area of responsibility

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCDRG308 Maintain and repair irrigation drainage systems	AHCDRG304 Maintain and repair irrigation drainage 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>

Assessment Requirements for AHCDRG308 Maintain and repair irrigation drainage systems

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has maintained and repaired an irrigation drainage system on at least one occasion and has:

- applied workplace health and safety requirements
- selected materials, tools, equipment and machinery appropriate to the scope of works
- isolated appliances, fixtures, fittings and related assemblies
- identified and minimised adverse environmental impacts of drainage systems
- gained access and carried out repairs
- used manual and mechanical drain clearing equipment
- removed blockages
- levelled and aligned the site
- implemented and recorded a drainage and equipment maintenance program.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace requirements applicable to health and safety in the workplace for maintaining irrigation drainage systems
- principles and practices for maintaining irrigation drainage systems, including:
 - components used in irrigation drainage systems
 - isolation processes and procedures
 - levelling and alignment processes
 - types and operational parameters of irrigation drains
 - environmental impacts of drainage systems.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - irrigation drainage system maintenance and repair equipment and tools
 - personal protective equipment applicable to maintaining irrigation drainage systems
- specifications:
 - workplace requirements applicable to health and safety in the workplace and maintaining irrigation drainage systems
 - work instructions and workplace procedures applicable to maintaining irrigation drainage systems
 - irrigation drainage system principles and practices
 - recording procedures
- relationships:
 - appropriate people, supervisor
- timeframes:
 - according to job requirements.

Assessors of this unit must satisfy the requirements of assessors in applicable vocational education and training legislation, frameworks and/or standards.

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