Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0. |

| AHCDRG304 | Maintain and repair irrigation drainage systems |
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| 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 occupational licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Drainage (DRG) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare to carry out irrigation drainage system maintenance | 1.1 Inspect site and assess drainage  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  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. Access to 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 |
| 4. Clear blockages in an irrigation drainage system | 4.1 Clear blockages  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 | 5.1 Confirm that earthworks and embankments meet system requirements  5.2 Manage and maintain drainage area vegetation  5.3 Control drainage area controlled weeds  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. | |
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| Skill | Description |
| Reading | * Interpret textual information from a range of sources to identify relevant and key information about workplace operations |
| Writing | * Document irrigation drainage repair and maintenance activities |
| 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 |



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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCDRG304 Maintain and repair irrigation drainage systems  Release 2 | AHCDRG304 Maintain and repair irrigation drainage systems  Release 1 | Minor changes to performance criteria and foundation skills | Equivalent unit |

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

| TITLE | Assessment requirements for AHCDRG304 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 irrigation drainage systems on at least one occasion and has:   * isolated appliances, fixtures, fittings and related assemblies * gained access and carried out repairs * levelled and aligned the site * repaired or removed blockages * used manual and mechanical drain clearing equipment. | |

| Knowledge Evidence |
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| 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:   * safe working practices applicable to 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 |
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| 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: * work instructions and workplace procedures applicable to maintaining irrigation drainage systems * irrigation drainage system maintenance and repair equipment and tools * personal protective equipment applicable to maintaining irrigation drainage systems * specifications: * 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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