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. |

| AHCIRG306 | Troubleshoot irrigation systems |
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| Application | This unit of competency describes the skills and knowledge required to locate and identify irrigation system faulty components and blockages, shut down and isolate components, replace faulty components, clear blockages and return irrigation system to normal operating status.  The unit applies to individuals who troubleshoot irrigation 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 | Irrigation (IRG) |

| 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. Locate and identify faulty components and blockages | 1.1 Determine irrigation system and component function  1.2 Check and review monitoring and maintenance records  1.3 Identify potential hazards and risks and implement safe working practices to manage risks  1.4 Minimise environmental impacts of irrigation maintenance activities  1.5 Select, fit and use personal protective equipment applicable to the task  1.6 Carry out operational tests  1.7 Identify and document faulty components and blockages |
| 2. Shut down and isolate component | 2.1 Apply shut down sequence and isolation procedures according to operation and maintenance manual  2.2 Verify safe shutdown or isolation  2.3 Install safety or security lock off devices and signage |
| 3. Replace faulty components and clear blockages | 3.1 Organise access to faulty components and blockages  3.2 Remove and repair or dispose of faulty components  3.3 Select and install replacement components  3.4 Clear blockages or replace blocked sections |
| 4. Return system to normal operating status | 4.1 Return isolated or shutdown components to service  4.2 Carry out operational tests  4.3 Return system to normal operational set-up  4.4 Report and record repair activities |

| 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 repair activities |
| Oral communication | * Use clear language to report irrigation repair activities |
| Numeracy skills | * Identify and record replacement component numbers |
| 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 |
| AHCIRG306 Troubleshoot irrigation systems  Release 2 | AHCIRG306 Troubleshoot irrigation 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 AHCIRG306 Troubleshoot irrigation 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 troubleshot and repaired irrigation systems on at least two occasions and has:   * carried out operational tests * identified adverse environmental impacts of irrigation activities and appropriate remedial action * operated, maintained and repaired irrigation systems * shut down and isolated components. | |

| 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 troubleshooting and repairing irrigation systems * irrigation equipment operation and maintenance manual * characteristics and operation of replaceable components of irrigation systems * environmental impacts of irrigation using water from any ground or underground source * isolation procedures * system malfunctions and their likely causes. |

| 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 troubleshooting and repairing irrigation systems * irrigation system operation and maintenance manual * irrigation system equipment * irrigation system repair tools and equipment * personal protective equipment applicable to repairing irrigation systems * specifications: * recording procedures * relationships: * 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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