Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and 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. |

| AHCIRG325 | Operate irrigation technology |
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| Application | This unit of competency describes the skills and knowledge required to operate irrigation technology, including preparing for work, operating equipment, irrigation controllers and sensors as part of irrigation installation, construction and operation.  The unit applies to individuals who operate irrigation technology 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. Prepare for work | 1.1 Confirm activity to be undertaken, including identifying potential hazards and risks and implementing safe working practices to manage risks  1.2 Select required tools and equipment and check for safe operation and accuracy  1.3 Select, fit and use personal protective equipment applicable to the task |
| 2. Operate irrigation equipment and collect samples | 2.1 Operate irrigation equipment according to operation and maintenance manual  2.2 Identify sampling points  2.3 Collect samples according to sampling techniques  2.4 Record and interpret readings and observations |
| 3. Operate irrigation controllers and sensors | 3.1 Link sensors to controllers by wiring or radio signals  3.2 Program controllers  3.3 Monitor accuracy and reliability of electronic flow control equipment and calibrate where necessary  3.4 Report discrepancies or malfunctions to management  3.5 Transport and store equipment appropriately |

| 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 readings and observations |
| Oral communication | * Use clear language to report discrepancies or malfunctions |
| Numeracy | * Interpret sample results, program irrigation controllers and calibrate electronic flow equipment |
| 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 |
| AHCIRG325 Operate irrigation technology  Release 2 | AHCIRG325 Operate irrigation technology  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 AHCIRG325 Operate irrigation technology |
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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 operated irrigation technology on at least two occasions and has:   * maintained and checked irrigation equipment for accuracy * checked the accuracy of electronic flow equipment and calibrated electronic flow equipment * operated irrigation controllers and sensors * operated pressure testing equipment * operated soil moisture testing equipment * operated technology to measure and monitor the irrigation system or the growing environment * operated water metering equipment * operated water testing equipment * recorded observations and data * recorded the results of testing * taken representative samples for measurement * taken samples for testing. | |

| 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 work practices including working with low voltage wiring according to AS/NZS3000:2018 * basic electrical testing procedures and safety practices * irrigation equipment operation and maintenance manual * environmental procedures for use, storage and recycling of electronic equipment and batteries * data recording procedures * irrigation controllers and sensors * sampling techniques * measurement procedures * pressure testing equipment procedures * soil moisture testing equipment procedures * water metering equipment procedures * water testing equipment procedures. |

| 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 operating irrigation technology * irrigation equipment operation and maintenance manual * irrigation equipment * irrigation technology tools and equipment and procedures * soil and water sampling equipment and techniques * soil and water testing equipment and procedures * pressure testing equipment and procedures * irrigation controllers and sensors * personal protective equipment applicable to operating irrigation technology * specifications: * data recording procedures * environmental procedures for use, storage and recycling of electronic equipment and batteries * 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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