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. |

| AHCIRG215 | Assist with low volume irrigation operations |
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| Application | This unit of competency describes the skills and knowledge required to assist with installing, operating and maintaining low volume irrigation systems. These systems use emitters such as drippers and generally use poly pipe.  The unit applies to individuals who assist with low volume irrigation operations under general supervision with limited autonomy and accountability.  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 with supervisor activity to be undertaken, including identifying potential hazards and risks and implementing safe working practices to minimise risks to self and others  1.2 Select appropriate materials, tools, equipment and machinery  1.3 Select, fit and use personal protective equipment and clothing applicable to the task  1.4 Identify the site for installation of the irrigation system |
| 2. Assist with installing irrigation components | 2.1 Prepare the site for installation works  2.2 Assemble and connect system components and test joints as directed  2.3 Assist with connecting system to water supply  2.4 Identify and report incorrect operation and take corrective actions as directed  2.5 Maintain a clean and safe work area |
| 3. Complete installation work | 3.1 Remove and dispose of waste material  3.2 Clean, maintain and store tools, equipment and machinery  3.3 Assist with flushing system |
| 4. Carry out start up and shutdown procedures as directed | 4.1 Follow start-up sequence  4.2 Shut down system components in sequence as directed  4.3 Drain system as directed  4.4 Record irrigation activity |
| 5. Assist with system maintenance | 5.1 Check emitters for serviceability and output  5.2 Maintain delivery components  5.3 Check water supply and pumping system periodically, where required  5.4 Keep maintenance records up to date |

| 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 | * Record irrigation system activity and maintenance |
| Oral communication | * Use clear language to confirm work activity and report irrigation system incorrect operation |
| Numeracy skills | * Identify irrigation system component part 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 |
| AHCIRG215 Assist with low volume irrigation operations  Release 2 | AHCIRG215 Assist with low volume irrigation operations  Release 1 | Minor changes to elements, 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 AHCIRG215 Assist with low volume irrigation operations |
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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 assisted with low volume irrigation operations on at least one occasion and has:   * assembled and joined irrigation system components * carried out basic maintenance tasks * carried out low volume irrigation operating tasks * completed installation work * fixed identified faults * followed directions to operate pumps, filters and valves * installed irrigation components * looked for leaks and faulty emitters * prepared materials, tools and equipment * recognised and reported faults * undertaken site preparation tasks as directed. | |

| 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:   * principles and practice of low volume irrigation operation * characteristics and operation of joints, valves and emitter components * components in low volume irrigation systems * emitter spacing, coverage and pressure * indicators of over and under watering * installation techniques and procedures * irrigation controllers * irrigation pipes, types and sizes * irrigation times to deliver sufficient volume without over watering * methods and techniques of low volume irrigation installation * operation of low volume irrigation system * set out procedures * system malfunctions and their likely causes * use of recycled water and colour coding of pipes * water requirements of relevant plants. |

| 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 assisting with low volume irrigation operations * low volume irrigation system maintenance tools and equipment * personal protective equipment applicable to assisting with low volume irrigation operations * 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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