Modification history

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

| AHCIRG219 | Assist with low volume irrigation operations |
| --- | --- |
| 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 licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Irrigation (IRG) |

| Elements | Performance Criteria |
| --- | --- |
| 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 during installation |
| 3. Complete installation work | 3.1 Remove and dispose of waste material according to workplace procedures  3.2 Clean, maintain and store tools, equipment and machinery  3.3 Assist with flushing system according to workplace procedures |
| 4. Carry out start up and shutdown procedures as directed | 4.1 Follow start-up sequence according to workplace procedures  4.2 Shut down system components in sequence as directed  4.3 Drain system as directed  4.4 Record irrigation activity according to workplace procedures |
| 5. Assist with system maintenance | 5.1 Check emitters for serviceability and output  5.2 Maintain delivery components according to workplace procedures  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. | |
| --- | --- |
| 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 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 |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCIRG219 Assist with low volume irrigation operations | AHCIRG215 Assist with low volume irrigation operations | Performance criteria clarified  Foundation skills added  Assessment requirements updated | Equivalent unit |

|  |  |
| --- | --- |
| 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 AHCIRG219 Assist with low volume irrigation operations |
| --- | --- |
| 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 at least one low volume irrigation operation on at least one occasion and has:   * applied workplace health and safety requirements * selected, cleaned and maintained materials, tools, equipment and machinery appropriate to the scope of works * prepared materials, tools and equipment * undertaken site preparation tasks as directed * assembled and joined irrigation system components * installed irrigation components * fixed identified faults * recognised and reported irrigation component incorrect operation * completed installation work * carried out low volume irrigation operating tasks * followed directions to operate pumps, filters and valves * carried out basic maintenance tasks * looked for leaks and faulty emitters. | |

| 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 assisting with low volume irrigation operations * characteristics and operation of joints, valves and emitter components * components in low volume irrigation systems * irrigation controllers * irrigation pipes, types and sizes * system malfunctions and their likely causes * installation techniques and procedures * methods and techniques of low volume irrigation installation * operation of low volume irrigation system * principles and practice of low volume irrigation operation * emitter spacing, coverage and pressure * indicators of over and under watering. |

| 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: * low volume irrigation system maintenance tools and equipment * personal protective equipment applicable to assisting with low volume irrigation operations * specifications: * workplace requirements applicable to health and safety in the workplace and assisting with low volume irrigation operations * work instructions and workplace procedures applicable to assisting with low volume irrigation operations * 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. |

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