

**Modification history**

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

AHCIRG326	Operate irrigation injection equipment
<b>Application</b>	<p>This unit of competency describes the skills and knowledge required to prepare, start up, operate and shut down irrigation injection equipment, monitor impacts of injection process and record information of irrigation injection equipment operation.</p> <p>The unit applies to individuals who operate irrigation injection equipment under broad direction and take responsibility for their own work.</p> <p>No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
<b>Prerequisite Unit</b>	Nil
<b>Unit Sector</b>	Irrigation (IRG)

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare equipment for injection operation	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 1.3 Select, fit and use suitable personal protective equipment applicable to the task 1.4 Select materials and services and confirm they are available and ready for operation 1.5 Prepare equipment and materials to meet injection requirements
2. Operate injection equipment process	2.1 Start up injection process according to operation and maintenance manual 2.2 Monitor control points to confirm performance is maintained within specification 2.3 Identify, rectify and report out-of-specification equipment performance 2.4 Deliver injection requirements 2.5 Put emergency procedures in place for spillage or chemical accidents
3. Shut down injection equipment	3.1 Shut down injection equipment 3.2 Clean injection equipment 3.3 Collect, treat, dispose or recycle waste generated by both the process and cleaning procedures
4. Monitor plant response and environmental impacts of injection	4.1 Monitor plant response to injection 4.2 Record and report environmental hazards of injection process 4.3 Maintain withholding periods for chemical application on food crops 4.4 Restrict access to areas where chemicals have been applied through injection if required
5. Record information	5.1 Record workplace information in the appropriate format 5.2 Record chemical application and storage details

<b>Foundation Skills</b>	
<i>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.</i>	
<b>Skill</b>	<b>Description</b>
Reading	<ul style="list-style-type: none"> <li>Interpret textual information from a range of sources to identify relevant and key information about workplace operations</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Document environmental hazards of injection process, and chemical application and storage details</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Use clear language to report out-of-specification equipment performance</li> </ul>
Numeracy skills	<ul style="list-style-type: none"> <li>Calculate chemical dilution rates</li> </ul>
Navigate the world of work	<ul style="list-style-type: none"> <li>Recognise and follow workplace requirements, including safety requirements, associated with own role and area of responsibility</li> </ul>

  

<b>Unit Mapping Information</b>			
<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
AHCIRG326 Operate irrigation injection equipment Release 2	AHCIRG326 Operate irrigation injection equipment Release 1	Minor changes to performance criteria and foundation skills	Equivalent unit

  

<b>Links</b>	Companion Volumes, including Implementation Guides, are available at VETNet: <a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72</a>
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<b>TITLE</b>	<b>Assessment requirements for AHCIRG326 Operate irrigation injection equipment</b>
<b>Performance Evidence</b>	
<p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has operated irrigation injection equipment on at least two occasions and has:</p> <ul style="list-style-type: none"> <li>• completed relevant calculations such as dilution rates</li> <li>• handled hazardous chemicals safely</li> <li>• identified injection requirements</li> <li>• implemented routine maintenance and minor repairs of the system</li> <li>• implemented routine system cleaning requirements</li> <li>• monitored usage and dilution rates</li> <li>• reported and recorded corrective action</li> <li>• selected and prepared injection materials</li> <li>• shut down equipment in response to an emergency situation</li> <li>• shut down equipment in response to routine shutdown requirements</li> <li>• taken corrective action in response to out-of-specification results or non compliance.</li> </ul>	
<b>Knowledge Evidence</b>	
<p>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:</p> <ul style="list-style-type: none"> <li>• safe working practices applicable to operating irrigation injection equipment, including backflow prevention</li> <li>• irrigation injection equipment operation and maintenance manual</li> <li>• basic irrigation injection equipment operating principles and process control systems where relevant</li> <li>• chemicals, cleaning agents and fertilisers used for injection and their purpose</li> <li>• irrigation injection equipment cleaning requirements and procedures</li> <li>• common causes of variation and corrective action required</li> <li>• control points and significance and methods of monitoring</li> <li>• correct chemical handling techniques</li> <li>• environmental issues and controls</li> <li>• safety data sheet (SDS) information for substances to be injected</li> <li>• lock-out and tag-out procedures</li> <li>• procedures for prevention of backflow</li> <li>• process specifications, procedures and operating parameters</li> <li>• purpose and operation of equipment and instrumentation components</li> <li>• recording requirements and procedures</li> <li>• services required</li> <li>• shutdown sequence.</li> </ul>	
<b>Assessment Conditions</b>	
<p>Assessment of skills must take place under the following conditions:</p> <ul style="list-style-type: none"> <li>• physical conditions: <ul style="list-style-type: none"> <li>• a workplace setting or an environment that accurately represents workplace conditions</li> </ul> </li> <li>• resources, equipment and materials: <ul style="list-style-type: none"> <li>• work instructions and workplace procedures applicable to operating irrigation injection equipment</li> <li>• irrigation injection equipment operation and maintenance manual</li> <li>• irrigation injection equipment</li> <li>• irrigation injection tools and equipment and procedures</li> <li>• injection chemicals, cleaning agents and fertilisers</li> <li>• personal protective equipment applicable to operating irrigation injection equipment</li> </ul> </li> <li>• specifications: <ul style="list-style-type: none"> <li>• material safety data for substances being injected</li> <li>• recording procedures</li> </ul> </li> </ul>	

<b>Assessment Conditions</b>
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| <ul style="list-style-type: none"><li>• environmental procedures for collection, treatment, disposal or recycling of waste</li><li>• relationships:<ul style="list-style-type: none"><li>• supervisor</li></ul></li><li>• timeframes:<ul style="list-style-type: none"><li>• according to job requirements.</li></ul></li></ul> |
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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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<b>Links</b>
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