



Australian Government

Assessment Requirements for AHCNSY314 Operate fertigation equipment

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

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 fertigation equipment on at least two occasions, and has:

- applied workplace health and safety requirements, including use of PPE
- selected, cleaned, used and maintained fertigation tools and equipment, and injection equipment, according to operators manuals, and scope of works
- selected and prepared fertigation and injection materials
- completed relevant calculations
- handled fertilisers and chemicals safely
- monitored and adjusted the delivery of fertilisers and chemicals
- monitored water quality and tested pH and Ec at irrigation emitter for correct application concentration
- reported and recorded corrective action
- taken corrective action in response to out-of-specification results or non-compliance
- implemented routine maintenance and minor repairs of the system
- removed and disposed of waste material
- recorded fertigation activities.

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 operating fertigation equipment, including backflow prevention
- purpose and operation of fertigation equipment and instrumentation components
- basic injection equipment operating principles and process control systems where relevant
- the principles and practices of fertigation operation, including:

- chemical handling techniques for fertiliser, chlorine, acid and cleaning agents
- safety data sheets (SDS) information for fertiliser and chemicals to be injected
- fertiliser solubility and dilution rates
- fertiliser compatibility or incompatibility in mixtures, with crops, and fertigation equipment
- water quality monitoring and pH and Ec testing techniques and procedures
- advantages of delivering fertilisers using an irrigation system
- fertigation and injection equipment operators' manuals
- fertigation and injection equipment monitoring and control points
- common causes of application variation and corrective action required
- fertigation and injection equipment shutdown sequence, including emergency shutdown
- cleaning procedures for fertigation and injection equipment
- workplace fertiliser and chemical application and storage, and fertigation activity recording requirements and procedures.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - fertigation and injection equipment operators manuals
 - fertigation and injection tools, equipment and procedures
 - fertilisers, chemicals and cleaning agents
 - personal protective equipment applicable to operating fertigation and injection equipment
- specifications:
 - workplace requirements applicable to health and safety in the workplace and operating fertigation and injection equipment
 - work instructions and workplace procedures applicable to operating fertigation and injection equipment
 - SDS for substances being injected
 - recording procedures
 - environmental procedures for collection, treatment, disposal or recycling of waste
- relationships:
 - supervisor
- timeframes:
 - according to job requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>