



Australian Government

AHCHYD301 Implement a maintenance program for hydroponic systems

Release: 1

AHCHYD301 Implement a maintenance program for hydroponic systems

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to implement a maintenance program for hydroponic growing systems.

It applies to individuals who take responsibility for own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources. All work is carried out to comply with workplace procedures.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Hydroponics (HYD)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Monitor plant health	1.1 Interpret and clarify workplace information about the existing hydroponic system 1.2 Assess growth rate of plants against targets set in the production plan 1.3 Assess plants for overall health 1.4 Assess plant for onset of fruit according to production plan
2. Monitor the	2.1 Monitor environmental parameters according to the production

Element	Performance criteria
hydroponic environment	plan and make adjustments as required 2.2 Collect samples and send off for analysis to identify potential sources of contamination 2.3 Monitor and adjust hygiene procedures 2.4 Monitor disposal of materials to ensure it follows enterprise guidelines
3. Monitor nutrient solution	3.1 Identify ingredients of the hydroponic nutrient solution 3.2 Take samples for testing and analysis 3.3 Interpret and discuss results 3.4 Modify nutrient solution to ensure correct balance of ingredients
4. Perform routine maintenance checks	4.1 Inspect all buildings and structures for wear and tear 4.2 Check equipment for delivering the nutrient solution 4.3 Check equipment controlling the atmospheric and root zone environments
5. Complete monitoring activities	5.1 Report problems to the manager 5.2 Record all checks

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCHYD301A Implement a maintenance program for hydroponic systems.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for AHCHYD301 Implement a maintenance program for hydroponic systems

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- monitor and assess plant health
- administer nutrients to a hydroponic system as instructed
- assist in performing nutrient measurement tests
- read nutrient analysis information
- undertake hydroponic system maintenance and repairs
- monitor hydroponic maintenance programs

Knowledge Evidence

The candidate must demonstrate knowledge of:

- principles and practices for implementing a hydroponic maintenance program
- characteristics of healthy and unhealthy plants
- environmental implications of the disposal of chemicals or chemical containers and the drainage of high nutrient effluent
- equipment used in hydroponic systems
- plant growing media choices and their properties
- potential problems associated with a range of crops grown in a hydroponic environment
- properties of a nutrient solution
- recirculated and non-recirculated systems
- testing methods for a hydroponic nutrient solution
- testing methods for the gauging of environmental parameters

Assessment Conditions

Assessors must satisfy current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -

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