



Australian Government

AHCPHT503 Manage a controlled growing environment

Release: 1

AHCPTH503 Manage a controlled growing environment

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to manage controlled growing environments.

It applies to individuals who analyse information and exercise judgement to complete a range of advanced skilled activities and demonstrate deep knowledge in a specific technical area. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems. 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

Production horticulture (PHT)

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. Identify crop requirements	1.1 Determine crop growth and production requirements according to a documented production plan 1.2 Research environmental parameters for optimal growing conditions for the specific crop, using available information resources 1.3 Identify and record controlled growing environment factors
2. Determine	2.1 Identify, cost and confirm availability of structures, machinery,

Element	Performance criteria
requirements for controlled growing environment	equipment and resources required to control environmental conditions 2.2 Identify detrimental environmental impacts associated with the controlled growing environment system
3. Prepare a management plan for controlled growing environment	3.1 Determine management objectives for controlled growing environment consistent with production plan and market requirements for crop quantity and quality 3.2 Develop a schedule of environmental control procedures according to controlled environment management objectives 3.3 Evaluate and report staff training needs with regard to operation and maintenance of environmental control systems 3.4 Document a budget supporting the controlled environment management plan and seek approval 3.5 Communicate the schedule of environmental control procedures clearly to staff
4. Manage controlled growing environment	4.1 Identify controlled environment indicators and thresholds for remedial action for monitoring 4.2 Develop monitoring frequency and schedule according to the requirements of the production plan and communicate to staff 4.3 Record, analyse and apply all monitoring data to ensure optimal plant development 4.4 Document and report remedial action undertaken 4.5 Monitor costs of the controlled growing environment system against budget 4.6 Record and report budget adjustments 4.7 Evaluate recorded information, budget data and production outputs and document operational achievements towards management objectives in a report

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 AHCPTH503A Manage a controlled growing environment.

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 AHCPT503 Manage a controlled growing environment

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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:

- develop a management plan to cover staff training, budgets, operating procedures and remedial actions
- develop environmental monitoring procedures
- evaluate and document the achievements towards management objectives
- identify the growing requirements of the crop
- prepare specifications for controlled growing infrastructure

Knowledge Evidence

The candidate must demonstrate knowledge of:

- principles and practices for managing controlled growing environments
 - controlled environmental conditions in regard to crop plant physiology, growth stages, and product quality and quantity
 - legislation and regulations relating to the controlled environment systems
 - market requirements for crop quantity and quality
 - monitoring, analysis and recording systems
 - plant physiology and biochemistry
 - quality production methods and techniques for a range of controlled environment plants
 - staff training requirements
 - techniques and methods of implementing optimal growing conditions for a range of horticultural crops

Assessment Conditions

Assessors must satisfy current standards for RTOs.

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