Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 5.0. |
| Release 1 | Initial release |

| AHCPHT406 | Control Phase II mushroom substrate process |
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| Application | This unit of competency describes the skills and knowledge required to control Phase II of a mushroom substrate process, including confirming requirements for mushroom substrate preparation and carrying out Phase II process.  The unit applies to individuals who apply specialist skills and knowledge to control Phase II of a mushroom substrate process. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.  All work is carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, and sustainability and biosecurity practices.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Production horticulture (PHT) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Confirm the requirements for Phase II mushroom substrate preparation | 1.1 Monitor and manage Phase II mushroom substrate process and ensure all equipment is operated safely  1.2 Check and ensure all temperature probes are functioning correctly  1.3 Ensure site quarantine protocols and workplace and personal hygiene requirements are followed  1.4 Assess condition and quality of compost before filling |
| 2. Carry out Phase II process | 2.1 Monitor placement of probes in air and substrate  2.2 Check amount and evenness of filling  2.3 Ensure doors are secure and vents and thermostats are set at completion of filling  2.4 Measure and record key factors and critical points  2.5 Adjust equipment settings to ensure optimum conditions for each Phase II sub-stage  2.6 Take random representative samples for laboratory testing  2.7 Determine ammonia levels before cool down for spawning |

| 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. | |
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| Skill | Description |
| Reading | * Identify and interpret information regarding requirements for controlling phase II of a mushroom substrate process |
| Writing | * Use clear language, accurate industry terminology and logical structure to record key factors and critical points |
| Numeracy | * Check temperature readings |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCPHT406 Control Phase II mushroom substrate process  Release 2 | AHCPHT406 Control Phase II mushroom substrate process  Release 1 | Performance criteria clarified  Foundation skills added  Assessment requirements updated | Equivalent unit |

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| 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 AHCPHT406 Control Phase II mushroom substrate process |
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| 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 controlled Phase II mushroom substrate processes on at least two occasions and has:   * applied relevant workplace health and safety procedures * assessed room or tunnel layout and determined most appropriate locations for taking substrate and air measurements * carried out effective troubleshooting during Phase II process * differentiated between Phase I substrate and substrate ready for spawning and described desired parameters of each stage * monitored and managed Phase II process for at least eight crops. | |

| Knowledge Evidence |
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| 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:   * principles and practices for controlling Phase II mushroom substrate processes, including: * concept of compost selectivity and biological indicators of compost quality * correct probe placement and calibration * factors influencing air quantity and distribution * Hazard Analysis Critical Control Point (HACCP), quality systems, emergency procedures, organisational structure * interpretation of chemical test results * how different systems (shelf, tray and tunnel) impact on temperature zones in substrate * key parameters to be recorded and monitored relating to temperature, ammonia and moisture content * objectives and desired parameters of each sub-stage of Phase II substrate preparation * overview of Phase I compost production and how it impacts on Phase II process * food safety standards, legislation and industry codes of practice relevant to controlling Phase II processes * site quarantine protocols * workplace requirements applicable to health and safety in the workplace for controlling Phase II mushroom substrate processes. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a workplace setting or an environment that accurately represents workplace conditions * specifications: * food safety standards, legislation and industry codes of practice relevant to controlling Phase II processes * site quarantine protocols * workplace requirements applicable to health and safety in the workplace for controlling Phase II mushroom substrate processes * 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. |

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