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 3.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCCHM305 | Conduct manual fumigation of vertebrate and invertebrate pests |
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| Application | This unit of competency describes the skills and knowledge required to determine, apply, monitor and clean up fumigants for the control of vertebrate and invertebrate pests.  The unit applies to individuals who work under broad direction and take responsibility for their own work and use discretion and judgement in the selection and use of available resources.  Licensing requirements apply to this unit but vary according to state/territory jurisdictions. Users are advised to check with their relevant regulatory authority. |
| Prerequisite Unit | AHCCHM303 Prepare and apply chemicals  AHCCHM304 Transport and store chemicals |
| Unit Sector | Chemicals (CHM) |

| 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.Determine type and method of fumigation | 1.1 Identify the pest characteristics and degree of infestation  1.2 Assess the infestation and determine threshold for fumigant treatment  1.3 Identify fumigant treatment options  1.4 Select fumigant and method of application for pest and site according to manufacturer instructions  1.5 Determine fumigation parameters to ensure desired conditions according to manufacturer instructions  1.6 Identify health and safety hazards, risks and controls for fumigation activities according to work health and safety procedures and regulations |
| 2.Prepare to use fumigant according to label and SDS | 2.1 Identify, select and use personal protective equipment according to manufacturer requirements  2.2 Identify and calculate application rates for fumigant for conditions according to manufacturer instructions  2.3 Implement hazard exclusion barriers and signage according to work health and safety procedures and regulations  2.4 Identify hazards, assess risks and implement control measures according to workplace health and safety procedures  2.5 Implement emergency procedures according to workplace procedures |
| 3.Conduct fumigation | 3.1 Ensure emergency response procedures and equipment ready and available according to workplace procedures  3.2 Check weather and forecasts for conditions favourable for fumigation activity to proceed according to fumigation method selected  3.3 Create seal in treatment area to ensure maximum effectiveness of fumigant according to workplace and manufacturers procedures  3.4 Apply fumigant in accordance with manufacturers requirements and safety procedures  3.5 Transport and store fumigants according to workplace procedures and chemical transport and storage regulations |
| 4.Monitor fumigation | 4.1 Monitor fumigation site and control access to maintain safe conditions according to manufacturer recommendations and workplace procedures  4.2 Monitor fumigation site for effective fumigation according to workplace procedures  4.3 Assess fumigation seal and integrity and take action to rectify according to workplace procedures |
| 5.Ventilate fumigated area | 5.1 Determine ventilation parameters according to manufacturer recommendations and workplace procedures  5.2 Calculate ventilation time according to manufacturer recommendations and workplace procedures  5.3 Ventilate site in accordance with manufacturers recommendations, safety data sheets, Code of Practice and workplace procedures  5.4 Checked for residual fumigant according to manufacturer instructions and workplace procedures |
| 6.Clean up following fumigation | 6.1 Remove site exclusion barriers, signs and locks when safe to do so according to workplace and manufacturers procedures  6.2 Clean, decontaminate, check and store fumigation equipment, safety signs and equipment and personal protective equipment according to workplace procedures  6.3 Handle, transport and store fumigants according to workplace procedures, manufacturer instructions and legislative requirements  6.4 Dispose of all waste as per label instructions |
| 7.Record application details | 7.1 Record details of fumigation activities and application according to workplace practices  7.2 Update chemical and resource inventory for used and remaining stock according to workplace procedures  7.3 Record and report safety incidents according to workplace procedures and regulatory requirements |

| 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 | * Reads and interprets safety data sheets, labels, manufacturer instructions, equipment operating instruction and other documentation and consolidates information to determine fumigant application actions and activity |
| Writing | * Accurately records and completes organisational records using clear language and correct spelling, grammar and terminology |
| Numeracy | * Performs mathematical calculations to determine rates of application of fumigant |
| Navigate the world of work | * Takes responsibility for following policies, procedures and regulations * Identifies and implements manufacturer requirements for fumigation |
| Get the work done | * Takes responsibility for planning, sequencing and prioritising tasks required for fumigation application activities |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCCHM305 Conduct manual fumigation of vertebrate and invertebrate pests | AHCCHM305 Conduct manual fumigation of vertebrate and invertebrate pests | Updated to meet Standards for Training Packages  Changes to Performance Criteria for clarity  Consolidated and deleted duplication in PC's | 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 AHCCHM305 Conduct manual fumigation of vertebrate and invertebrate pests |
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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 on at least one occasion the individual has demonstrated that they have fumigated vertebrate and invertebrate pests manually including:   * selected the appropriate fumigant option for the pest characteristics and infestation * determined fumigation parameters according to manufacturer instructions and safety data sheets * prepared fumigant according to chemical manufacturers instructions * identified health and safety hazards, risks and implemented controls fumigation activities * maintained the fumigant inventory and disposed of waste fumigant and materials according to workplace and environmental procedures * implemented emergency response procedures to maintain a safe site * prepared site for fumigation and erected exclusion barriers and signage * checked weather conditions and forecasts to decide on fumigation progression * sealed treatment area, applied the fumigant, monitored fumigation activity and ventilated sites * checked for residual fumigant according to workplace procedures * restored the treatment area, cleaned and decontaminated the equipment * maintained records, stock inventories and reported on work activities and incidents according to workplace requirements and regulations. | |

| 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:   * pests and their characteristics for fumigation control * primary vertebrate and invertebrate pests that can be controlled by manual fumigation methods * fumigants their use and action * fumigation parameters to consider including; size of area, weather conditions, type of material concentration and safety implications * Interpretations and use of labels and safety data sheets * techniques to seal fumigation treatment sites * site characteristics and conditions for suitable for fumigation * relevant legislation and licencing requirements for fumigant use * risk factors including human and animal health, weather, leakage, spillage and environment * safety and environmental requirements for disposal of fumigant, spills and waste materials * clean-up procedures and decontamination * Integrated Pest Management (IPM) strategy and relation to fumigation practices * pre and post fumigation safety procedures for site * transporting and storage requirements fumigants * record keeping procedures and practices for workplaces and regulations * tests and testing for residual fumigants * inventory and stock records and procedures for fumigants. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a typical workplace environment or an environment that accurately represents workplace conditions * access to storage facilities for fumigants * resources, equipment and materials: * access to site requiring fumigation * use of fumigants * use of personal protective equipment * access to fumigation aeration equipment * access to fumigant measuring and mixing equipment * access to fumigant testing equipment * use of materials required to seal treatment area * specifications: * use of specific workplace documents such as work instructions and procedures for fumigation * access to fumigant labels and safety data sheets (SDS) * access to legislation and regulations relevant to handling, storage, transport and use of fumigants * access to manufacturers and maintenance instructions for hand fumigation equipment * access to relevant standards for residual fumigation test results.   Competency is to be assessed in the workplace OR workplace and simulated environment that accurately reflects performance in a real workplace setting.  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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