



Australian Government

Department of Education, Employment and Workplace Relations

AHCCHM305A Conduct manual fumigation of vertebrate and invertebrate pests

Release: 1

AHCCHM305A Conduct manual fumigation of vertebrate and invertebrate pests

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of manual fumigation of vertebrate pests and invertebrate pests in stored grain, the apiary industry, agricultural lands and natural landscapes and defines the standard required to: assess the need for fumigation; select appropriate fumigant and application method; apply fumigant and monitor site; record work activities.
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Application of the Unit

Application of the unit	This unit relates to the control of vertebrate and invertebrate pests in grain storage, rabbit warrens and beehives by means of manual fumigation. It involves applying well-developed skills with some discretion and judgement under routine supervision. It requires taking responsibility for own work output. This unit may be deemed to have a time limit when used as part of an accreditation or licence process.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Determine type and method of fumigation	1.1. Identify the nature and level of pest presence. 1.2. Determine need for fumigant use within an integrated pest management strategy. 1.3. Select method of fumigant application to suit type of pests and site in accordance with registered product labels, environmental, legislative, Occupational Health and Safety (OHS) requirements and industry practice. 1.4. Determine type of fumigant and application rate in accordance with registered product labels and Material Safety Data Sheets (MSDSs) and environmental, legislative, OHS and industry practice. 1.5. Identify and report any factors affecting the safe application of fumigants. 1.6. Determine storage capacity to ensure fumigation conditions are in accordance with manufacturers' specifications and environmental, legislative, OHS and industry practice. 1.7. Conduct and record OHS risk assessment for both fumigation and post fumigation re entry.
2. Prepare to use fumigant according to label and MSDS	2.1. Select and check for use Personal Protective Equipment (PPE) according to label and MSDSs. 2.2. Define and calculate application/dosage rates. 2.3. Prepared fumigation site to control inadvertent entry or exposure. 2.4. Put in place emergency and confined spaces procedures.
3. Conduct fumigation	3.1. Assess weather conditions and forecasts prior to and during application. 3.2. Created airtight seal in fumigation area to ensure site health and safety, and maximum effectiveness of fumigation in accordance with label and industry practice. 3.3. Where required fumigation site is signposted and barricaded to prevent access. 3.4. Control site until area is suitable for re-use in accordance with label, legislation, standards and enterprise policy. 3.5. Apply fumigant safely and effectively according to label and industry practice. 3.6. Ensure First Aid equipment is available onsite.
4. Monitor fumigation	4.1. Monitored fumigation site to control access and maintain safe conditions during active period for

ELEMENT	PERFORMANCE CRITERIA
	time specified on registered label. 4.2. Monitor fumigation site for pest activity. 4.3. Assess fumigant escape for health and safety implications and take immediate action if required.

ELEMENT	PERFORMANCE CRITERIA
5. Ventilate fumigated area	5.1. Calculate time required for ventilation from directions on registered label. 5.2. Determine conditions are suitable for ventilation to minimise risk to health and safety. 5.3. Ventilation method followed is in accordance with registered label, MSDSs, Code of Practice (COP) and enterprise standards. 5.4. Ventilate site is in controlled and safe manner.
6. Clean up following fumigation	6.1. Removed barriers, signs and locks and store for future use. 6.2. Clean, decontaminate, check and store equipment and PPE in accordance with manufacturer's specifications, OHS and industry practice. 6.3. Transport and store fumigants in accordance with label, OHS and industry practice. 6.4. Dispose of all waste in accordance with label, legislative, OHS environmental and industry practice.
7. Record application details	7.1. Record details of fumigant applications in accordance with legislative requirements, label directions, safe operating procedures (SOPs), and industry practice. 7.2. Record details of fumigant used in the chemical inventory/register according to legislation. 7.3. Maintain inventory of PPE. 7.4. Follow procedures and requirements for reporting fumigation details to management/employer. 7.5. Record and report safety incidents or poisoning to the appropriate person or authority in accordance with legislative requirements.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- interpret and apply chemical label requirements in the preparation of fumigants
- prepare fumigants
- storage and disposal of fumigants

REQUIRED SKILLS AND KNOWLEDGE

- use of PPE
- prepare site including signage
- mentoring and ventilation of sites
- application of fumigants
- use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- primary vertebrate and invertebrate pests controlled by manual fumigation methods (rabbits, pests of beehives and stored grain) and their life cycles
- fumigant types
- threshold pest levels and cost benefit options
- fumigant label and MSDSs formats
- interpretation and application of fumigant label requirements
- site factors in relation to fumigation
- types and application of personal protective equipment
- legislation and regulations including OHS and licensing requirements in relation to fumigant use
- regulations including, signage and entry restrictions
- risk factors including human and animal health, weather, leakage, spillage and environmental
- requirements for disposal of excess fumigants, clearing spillages and equipment clean up.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • assess the need for fumigation • select appropriate fumigant and application method • apply fumigant and monitor site • record work activities.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Manual fumigation may include:	• vertebrate and invertebrate pests of stored grain • rabbits • pests of beehives.
The fumigants that apply include	• aluminium phosphide tablets and chloropicrin.

Unit Sector(s)

Unit sector	Chemicals
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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