



**Australian Government**

# **AHCCHM301 Use application equipment to apply fumigant in confined spaces**

**Release: 1**

# AHCCHM301 Use application equipment to apply fumigant in confined spaces

## Modification History

| Release | TP Version | Comment         |
|---------|------------|-----------------|
| 1       | AHCv1.0    | Initial release |

## Application

This unit of competency describes the skills and knowledge required to use application equipment to fumigate grain, seed, crops and plants in confined spaces.

All work must be carried out to comply with workplace procedures, work health and safety and pesticide legislation and codes.

All work is carried out to comply with Safety Data Sheets and chemical label directions.

This unit does not cover individuals physically entering and working within an enclosed or confined space.

This 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, legislative, regulatory or certification requirements may apply to this unit. Candidates should confirm the regulatory requirements that apply in their relevant State or Territory before undertaking this unit.

## Pre-requisite Unit

AHCCHM303 Prepare and apply chemicals

AHCCHM304 Transport and store chemicals

## Unit Sector

Chemicals (CHM)

## Elements and Performance Criteria

| Element                                   | Performance criteria                                                                            |
|-------------------------------------------|-------------------------------------------------------------------------------------------------|
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |

| Element                                                                         | Performance criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Plan fumigation                                                              | 1.1 Determine the need for fumigation as an option within an Integrated Pest Management (IPM) and Integrated Resource Management (IRM) strategy<br>1.2 Determine type of fumigant and application rate<br>1.3 Select method of fumigant application to suit type of pest, facility and grain or plant type<br>1.4 Assess appropriateness of facility and conditions for selected fumigation method<br>1.5 Select and use appropriate personal protective equipment as per label instructions.                                                                                                                                                                                                                  |
| 2. Prepare storage facility for fumigation, application equipment and fumigants | 2.1 Identify hazards, assess risks and implement control measures in relation to the use of fumigants in enclosed spaces<br>2.2 Establish security measures to control access during fumigation and prescribed re-entry periods<br>2.3 Erect signage and barriers to control risk of inadvertent entry to facility<br>2.4 Check seal, calculate volume of storage facility, and take appropriate measurement to ensure the required concentration of fumigant is retained<br>2.5 Check operational effectiveness of equipment<br>2.6 Calibrate fumigation equipment to deliver the correct application rate<br>2.7 Transport and store fumigants<br>2.8 Prepare fumigant in accordance with label instructions |
| 3. Conduct and monitor fumigation                                               | 3.1 Apply fumigation using appropriate equipment, fumigation methods and sealing methods<br>3.2 Respond to emergency situations using emergency response procedures<br>3.3 Monitor fumigation site during exposure time and ventilation to prevent unauthorised access<br>3.4 Maintain integrity of seals throughout the active fumigation period                                                                                                                                                                                                                                                                                                                                                              |
| 4. Ventilate storage facility                                                   | 4.1 Establish ventilation and re-entry times and control risks<br>4.2 Ventilate facility to remove fumigant in a safe and controlled manner<br>4.3 Test for evidence of residual gas using appropriate equipment<br>4.4 Notify appropriate personnel of any further risk control measures required                                                                                                                                                                                                                                                                                                                                                                                                             |
| 5. Restore storage facility                                                     | 5.1 Collect and remove all equipment, fumigants and waste<br>5.2 Remove signage and barriers when facility is available for re-use                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| Element                                                  | Performance criteria                                                                                                                                                |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                          | 5.3 Restore storage facility                                                                                                                                        |
| 6. Clean, safety-check and store equipment and fumigants | 6.1 Clean, check, decontaminate and store equipment and personal protective equipment in appropriate location<br>6.2 Dispose of all waste as per label instructions |
| 7. Record fumigation details                             | 7.1 Record details of fumigant applications<br>7.2 Record and report gas escapes, safety incidents or poisoning to the appropriate person or authority              |

## 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 not equivalent to AHCCHM301A Conduct fumigation in enclosed spaces.

## 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 AHCCHM301 Use application equipment to apply fumigant in confined spaces

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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:

- determine the need for fumigation as an option within an Integrated Pest Management (IPM) and IRM strategy
- select the appropriate fumigant and application method
- prepare fumigants
- set up and calibrate fumigation equipment
- prepare and monitor the facility and equipment
- seal the facility
- conduct fumigation
- check for residual fumigant gas
- restore the facility and cleaning the equipment
- record work activities
- use appropriate personal protective equipment
- follow emergency procedures during an accident or spillage
- follow enterprise work health and safety policies

## Knowledge Evidence

The candidate must demonstrate knowledge of:

- primary and secondary pests relevant to grain, seed, crops or plants to be treated
- fumigant free options for pest control including Integrated Pest/Resistance Management principles
- fumigant labels and SDS used in the workplace
- how to interpret and apply fumigant label requirements
- factors and considerations in relation to fumigation of relevant grain, seed, crops and plants

- range of techniques to seal a facility
- different personal protective equipment and their uses
- legislation, regulations and licensing requirements in relation to fumigant use
- confined space regulations including signage, gas detection and entry procedures
- features, functions, calibration and set up of fumigation equipment
- risk factors including human and animal health, leakage, spillage and environmental
- how to assess for residual gas and safe re-entry periods
- consequence of fumigant residues and Maximum Residue Limits (MRLs)
- ventilation processes
- requirements for disposal of excess fumigants, clearing spillages and equipment clean up

## **Assessment Conditions**

Competency is to be assessed in the workplace OR simulated environment that accurately reflects performance in a real workplace setting.

Assessors must satisfy current standards for RTOs

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