



Australian Government

AHCCHM302 Fumigate soil

Release: 1

AHCCHM302 Fumigate soil

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to fumigate soil or media or both to control microbiological and other pests.

All work must be carried out to comply with workplace procedures, work health and safety and pesticide legislation and codes, and sustainability practices. All work is carried out to comply with Safety Data Sheets and chemical label directions.

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.
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. 1.2 Determine type of fumigant and application rate

Element	Performance criteria
	1.3 Select method of fumigant application to suit type of pest and soil or media type 1.4 Assess appropriateness of site and soil conditions for selected fumigation method
2. Prepare site for fumigation	2.1 Identify hazards, assess risks and implement control measures in relation to the use of fumigants 2.2 Establish site security measures to control access during fumigation and prescribed re-entry periods 2.3 Set up emergency system 2.4 Prepare soil, measure soil temperature and check soil moisture to ensure that the required concentration of fumigant is retained in the soil for the required period of time
3. Prepare application equipment and fumigants	3.1 Select and use appropriate personal protective equipment as per label instructions 3.2 Select application equipment appropriate for the fumigation in accordance with label directions and industry practice 3.3 Check operational effectiveness of fumigation machinery and equipment 3.4 Calibrate fumigation equipment to deliver the correct application rate 3.5 Transport and store fumigants 3.6 Prepare fumigant
4. Conduct and monitor fumigation	4.1 Apply fumigant using appropriate equipment and fumigation methods 4.2 Respond to emergency situations using emergency response procedures 4.3 Apply appropriate soil sealing methods to contain fumigant 4.4 Monitor fumigation site during exposure time to prevent unauthorised access 4.5 Aerate soils fully and accurately test for evidence of residual gas by conducting germination test or sowing indicator crop 4.6 Establish re-entry times and control risks to human and animal health 4.7 Notify appropriate personnel of any further risk control measures required 4.8 Ventilate fumigation enclosure if fumigation performed in glasshouse or similar to remove fumigant in safe and controlled manner
5. Restore site	5.1 Collect and remove all equipment, fumigants and waste 5.2 Remove signage when site is available for re-use

Element	Performance criteria
	5.3 Restore site
6. Clean, safety-check and store equipment and fumigants	6.1 Clean, decontaminate, check and store equipment and personal protective equipment in appropriate location 6.2 Dispose of all waste as per the label
7. Record fumigation details	7.1 Record details of fumigation 7.2 Record and report 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 AHCCHM302A Fumigate soil using chemicals.

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 AHCCHM302 Fumigate soil

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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:

- assess the need for fumigation
- select appropriate fumigant and application method
- conduct pre-operational checks on equipment and personal protective equipment
- prepare site for fumigation
- set up and calibrating fumigation equipment
- fumigate soils safely in accordance with chemical label
- aerate soils and check for residual fumigant gas
- ventilate fumigation enclosure if fumigation is performed in glasshouse or similar
- clean and store fumigation equipment and personal protective equipment after completing work
- use appropriate personal protective equipment
- follow emergency procedures during an accident or spillage
- complete fumigation records follow enterprise work health and safety policies

Knowledge Evidence

The candidate must demonstrate knowledge of:

- primary and secondary soil/media pests
- threshold pest levels and cost benefit
- fumigant free options for pest control including Integrated Pest/Resistance Management principles
- how to interpret fumigant label and SDS requirements
- soil, media type, moisture and temperature factors in relation to fumigation
- features, functions, calibration and set up of fumigation equipment
- legislation, regulations and licensing requirements in relation to fumigant use

- risk factors including human and animal health, weather, leakage, spillage and environmental
- requirements for disposal of excess fumigants, clearing spillages and equipment clean up
- a variety of primary and secondary soil and media pests
- a variety of fumigant labels and SDS used in the workplace
- types and application of personal protective equipment

Assessment Conditions

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

Assessors must satisfy current standards for RTOs.

Links

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