



Australian Government

AHCCHM309 Fumigate soil

Release: 1

AHCCHM309 Fumigate soil

Modification History

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

Application

This unit of competency describes the skills and knowledge required to select and use application equipment to fumigate soil or growing media for the control of pathogens and pests.

The unit applies to individuals who work under broad direction and take responsibility for their own work. They use discretion and judgement in the selection, allocation and use of available resources and for solving problems.

State or territory licensing, legislative or certification requirements apply in some jurisdictions.

Pre-requisite Unit

Nil

Unit Sector

Chemicals (CHM)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan fumigation	1.1 Determine the need for fumigation as an option for pest management strategy of the workplace 1.2 Assess site and soil conditions for suitability of fumigation as a method to use 1.3 Select method of fumigant and application equipment to suit type of pest and soil or media to be treated 1.4 Identify and select fumigant and its application rate according to

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	chemical label 1.5 Identify hazards, assess risks and implement control measures for soil and media fumigation 1.6 Establish site security measures to control access during fumigation and prescribed re-entry periods according to chemical label and workplace procedures 1.7 Determine appropriate personal protective equipment according to fumigant safety requirements
2. Prepare site for fumigation	2.1 Implement controls and site security measures according to workplace procedures 2.2 Erect signage and barriers to control risk of inadvertent entry to facility 2.3 Ensure site emergency procedures are in place and ready to implement 2.4 Assess the soil for readiness for fumigation treatment
3. Prepare application equipment and fumigants	3.1 Select application equipment appropriate for the fumigant and according to workplace procedures and industry practice 3.2 Check operational effectiveness of fumigation equipment according to operating procedures 3.3 Calibrate fumigation equipment to deliver the correct application rate according to chemical label and operating instructions 3.4 Transport and store fumigants according to chemical label and safety data sheets (SDS) and regulatory requirements 3.5 Select, ensure serviceability, fit and use personal protective equipment for selected fumigant according to chemical label and SDS 3.6 Prepare fumigant according to chemical label and equipment operating instructions
4. Conduct and monitor fumigation	4.1 Apply fumigant according to planned application method, pest management strategy and chemical label 4.2 Apply appropriate soil sealing methods to contain fumigant 4.3 Monitor fumigation site during exposure time to prevent unauthorised access 4.4 Aerate soils according to chemical label instructions and workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	<p>4.5 Test for evidence of residual fumigant according to workplace procedures and maximum residue limits for the soil or media</p> <p>4.6 Implement re-entry procedures to control risks to human and animal health</p> <p>4.7 Notify appropriate personnel of any further risk control measures required</p> <p>4.8 Ventilate fumigation enclosure in safe and controlled manner according to chemical labels instructions, SDS and workplace procedures</p> <p>4.9 Respond to emergency situations according to workplace emergency procedures</p>
5. Restore site	<p>5.1 Collect and remove equipment, fumigants and waste according to workplace procedures</p> <p>5.2 Remove signage according to site security measures</p>
6. Clean, safety-check and store equipment and fumigants	<p>6.1 Clean, decontaminate, check and store equipment and personal protective equipment according to workplace procedures, chemical labels, SDS and regulatory requirements</p> <p>6.2 Dispose of all waste according to chemical label instructions and workplace environmental procedures</p>
7. Record fumigation details	<p>7.1 Record details of fumigation applications according to workplace procedures and regulatory requirements</p> <p>7.2 Record and report safety incidents according to workplace procedures</p>

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.

Skill	Description
Reading	<ul style="list-style-type: none"> Read and interpret safety data, labels, manufacturers specifications, operating procedures, specifications, and other documentation and consolidates information to determine

Skill	Description
	fumigation actions and activity
Writing	<ul style="list-style-type: none"> Accurately record and complete organisational documents using clear language and correct spelling, grammar and terminology
Numeracy	<ul style="list-style-type: none"> Perform mathematical calculations to determine soil volumes and rates of application and to check, interpret and confirm results of tests
Oral Communication	<ul style="list-style-type: none"> Effectively participate in verbal exchanges using active listening to convey and clarify post treatment risks and control measures
Navigate the world of work	<ul style="list-style-type: none"> Identify and implement manufacturer requirements for fumigants
Get the work done	<ul style="list-style-type: none"> Take responsibility for planning, sequencing and prioritising tasks required for fumigation activities Address problems and initiate standard procedures in response to emergencies applying problem solving processes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCCHM309 Fumigate soil	AHCCHM302 Fumigate soil	Removal of prerequisite units Minor changes to Performance Criteria for clarity Updated Performance Evidence and Knowledge Evidence	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>