



Australian Government

Assessment Requirements for AHCCHM309 Fumigate soil

Release: 1

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Modification History

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

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has on at least one occasion demonstrated the ability to safely apply a fumigant to soil ensuring they have:

- determined need, appropriateness and method for fumigating a soil
- determined hazards and risks and established safety and security resources and control measures required
- prepared soil for safe fumigation
- determined fumigant requirements and prepared the fumigant and equipment for treatment according to fumigant label instructions and safety data sheets (SDS)
- transported, handled and stored fumigants according to safety procedures, label and legislative requirements
- ensured personal safety by selecting, fitting and using appropriate personal protective equipment (PPE)
- applied fumigant and monitored the safety and integrity of the fumigation process, responding appropriately to emergencies
- rendered the soil and surrounding area safe through aeration and conducted tests to establish safe soil and air quality notifying personnel of residual risks
- removed fumigation materials, waste and temporary resources from treatment area and disposed of waste according to workplace and environmental procedures
- complied with fumigant label instructions and SDS
- checked, decontaminated, cleaned and stored equipment used in the fumigation process according to workplace procedures
- maintained records of fumigation activities and incidents and reported according to workplace procedures.

Knowledge Evidence

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:

- primary and secondary soil pests, diseases and weeds to be treated and factors and considerations in relation to the use of fumigation including threshold pest levels and cost benefit
- pest management strategies and relation to the use and selection of fumigation methods, including:
 - chemical
 - mechanical
 - biological
 - cultural
 - integrated pest management including resistance management principles
- soil, media type, moisture and temperature factors relative to fumigation and methods employed to “seal” soils during fumigation
- types of fumigant used for treating soils, their mode of action, methods of application, transport, storage and handling
- fumigant labels and SDS and how to interpret and apply label requirements for specific soil and media situations
- equipment used in fumigation, their setup, calibration, operation, shutdown, care and maintenance
- calculations required to determine fumigant rates of application
- monitoring procedures during a fumigation process and methods of assessing escape
- safety requirements including signage, equipment, PPE for use when handling fumigants and conducting fumigation activities
- legislation, regulations, codes of practice and licensing requirements relevant to fumigant use, transport, storage and handling
- chemical hazards and risks factors including human and animal health, leakage, spillage, environment damage and control measures required to mitigate risk
- methods for aerating treated soils and assessment of residual fumigants including testing fumigant residues and maximum residue limits
- requirements for disposal of excess fumigants, clearing spillages and equipment clean up
- records required when conducting fumigation activities and related safety reporting procedures.

Assessment Conditions

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
- resources, equipment and materials:
 - soil requiring fumigation
 - fumigants
 - PPE
 - fumigation and soil aeration equipment

- fumigant measuring and mixing equipment
- fumigant testing equipment
- materials required to seal soil for fumigation
- specifications:
 - specific workplace documents, including work instructions and procedures for fumigation
 - fumigant labels and SDS
 - legislation, regulations, codes of practice relevant to handling, storage, transport and use of fumigants
 - manufacturers' operation and maintenance instructions for fumigation equipment
 - relevant standards for fumigation test results.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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