



Australian Government

AHCCHM306 Prepare and apply chemicals for hand held application equipment

Release: 2

AHCCHM306 Prepare and apply chemicals for hand held application equipment

Modification History

Release	Comments
Release 2	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 3.0.
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to prepare a basic application plan, prepare chemicals and equipment and apply chemicals for the control of identified pests, weeds or diseases using hand held application equipment.

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. Determine the need for chemical use and prepare basic application	1.1 Identify the characteristics of the pest, weed or disease and assess the control requirements 1.2 Assess and select a chemical control option according to

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<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
plan	workplace procedures 1.3 Identify health and safety in the workplace hazards, risks and controls for selected chemical 1.4 Determine the requirement for chemical usage according to chemical label instructions 1.5 Prepare a basic application plan according to workplace procedures 1.6 Notify stakeholders of intended chemical application according to workplace procedures and legislative and regulatory requirements
2. Prepare chemical mixes	2.1 Access the application plan and determine chemical application parameters according to chemical label instructions 2.2 Identify hazards, assess risks and implement control measures for application method according to chemical label and health and safety in the workplace procedures 2.3 Interpret and apply requirements from chemical labels and safety data sheets (SDS) 2.4 Identify, select, fit and use personal protective equipment (PPE) according to chemical label and workplace safety procedures 2.5 Select appropriate mixing equipment and a suitable location for mixing and loading according to workplace procedures 2.6 Prepare chemicals according to chemical label instructions 2.7 Clean preparation equipment and work site of residues and spillage according to chemical label instructions and workplace procedures
3. Calibrate application equipment	3.1 Select application equipment to be used to minimise off target risk and maximise efficacy 3.2 Carry out pre-operational checks of application equipment 3.3 Calibrate equipment in accordance with manufacturers' specifications and application plan 3.4 Load the equipment with chemical according to operating instructions and workplace safety procedures
4. Apply chemicals	4.1 Monitor and assess weather conditions and forecasts to ensure effective chemical application according to application plan 4.2 Identify, select, fit and use PPE according to chemical label

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	instructions 4.3 Apply chemical while minimising off target damage according to label directions, SDS and application plan 4.4 Assess health and safety hazards and risks and implement controls according to workplace procedures 4.5 Clean up chemical spills according to workplace and manufacturer procedures
5. Clean up equipment and complete records	5.1 Clean and decontaminate application equipment according to operator instructions, SDS and legislative and regulatory requirements 5.2 Dispose of chemicals and used containers according to manufacturer instructions and legislative and regulatory requirements 5.3 Clean and store PPE according to workplace procedures 5.4 Complete chemical treatment records and report incidents according to workplace procedures and legislative and regulatory requirements

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	Read and interpret SDS, signs and symbols, chemical labels, equipment operating instruction and other documentation and consolidates information to determine chemical application actions and activity
Writing	Accurately record and complete organisational records using clear language and correct spelling, grammar and terminology
Numeracy	Perform mathematical calculations to determine rates of application chemical mixtures
Oral Communication	Effectively participate in verbal exchanges using active listening and to convey and clarify chemical applications notifications
Navigate the world of work	Take responsibility for following policies, procedures and regulations

Skill	Description
	Identify and implement manufacturer requirements for chemical use
Get the work done	Take responsibility for planning, sequencing and prioritising tasks required for chemical application activities

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCCHM306 Prepare and apply chemicals for hand held application equipment Release 2	AHCCHM306 Prepare and apply chemicals for hand held application equipment Release 1	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>

Assessment Requirements for AHCCHM306 Prepare and apply chemicals for hand held application equipment

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that on at least one occasion the individual has demonstrated that they have prepared and applied chemicals using hand held application equipment, including:

- determined the need for chemical application by assessing the specific infestation
- developed an application plan according to workplace procedures
- identified health and safety hazards, risk and implemented control procedures and used personal protective equipment (PPE) according to workplace procedures
- notified stakeholders of planned chemical application
- interpreted chemical labels and applied chemical according to manufacturer requirements, safety data sheets (SDS) and application plan
- determined the chemical application parameters according to workplace and
- complied with manufacturer requirements, regulations and environmental factors
- monitored and assessed weather conditions for application
- selected and conducted pre-operational checks of equipment according to operator instructions
- completed at least one calibration activity for hand held application equipment
- mixed and loaded chemicals in accordance with label and application plan
- cleaned equipment, spills and disposed of waste according to procedures
- maintained records and reported incidents according to workplace procedures and regulations.

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:

- control options when selecting chemicals for pest, disease and weed control, including:

- chemical
- cultural
- biological
- Integrated Pest Management
- parameters affecting the selection of chemical and equipment for application, including:
 - common pests, weeds and diseases
 - rate of application
 - type of application equipment
 - set-up requirements
 - pest and disease resistance
- chemical labels, SDS reading and interpretation
- impact of weather factors on the safe and effective application of chemicals
- factors that determine off target contamination, including:
 - physical movement of chemicals (e.g. animals moving baits or soil movement)
 - chemical formulation
 - droplet size
 - wind speed
 - temperature
 - temperature inversions
 - controlling spray drift and air concentrations
- risk factors of chemical application, including:
 - human and animal health
 - spillage
 - residues in environment, plants and animals
 - withholding periods
- preparing chemicals including mixing order, compatibility, adjuvants and water quality
- requirements for disposal of excess chemicals, clearing spillages and equipment clean up
- selecting and operating suitable hand held application equipment, including:
 - operation and use
 - features, functions
 - calibration techniques
 - nozzle identification and selection
- legislation, regulations and licensing requirements in relation to chemical use
- stakeholders and required notifications including, neighbours, staff and statutory notifications
- health and safety in the workplace hazards, risks and controls including PPE
- regulatory and industry policies on off target management.

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:
 - chemicals
 - PPE
 - application equipment
 - chemical measuring and mixing equipment
- specifications:
 - specific workplace documents, including work instructions and procedures for chemical application
 - chemical labels and SDS
 - legislation and regulations about use of chemicals
 - manufacturers' operation and maintenance instructions for equipment
 - access to weather reports.

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

Links

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