



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **AHCCHM501A Develop and manage a chemical use strategy**

**Release: 1**

## AHCCHM501A Develop and manage a chemical use strategy

### Modification History

Not Applicable

### Unit Descriptor

<b>Unit descriptor</b>	This unit covers the development and management of a chemical use strategy and defines the standard required to: implement procedures to assess the risk of chemical transport, storage, handling, application and disposal; develop an induction program that covers the enterprise Occupational Health and Safety (OHS) system and roles and responsibilities of all workers within that system; base application techniques on spray drift management principles, accurate placement of chemical and the correct use of Personal Protective Equipment (PPE); make application to authorities in the case of off label use; meet all withholding periods and requirements to limit access to sprayed areas; meet chemical storage systems industry and legislative requirements; document chemical emergency procedures and all requirements for chemical signage and review chemical procedures based on enterprise records.
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### Application of the Unit

<b>Application of the unit</b>	This unit applies those who manage the use and application of chemicals in commercial settings.
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### Licensing/Regulatory Information

Not Applicable

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Not Applicable

## Elements and Performance Criteria

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>

ELEMENT	PERFORMANCE CRITERIA
1. Identify and evaluate need for chemical use	<p>1.1. Integrated Pest Management (IPM) and Integrated Resistance Management (IRM) strategies are interpreted and the organisational chemical requirements are identified.</p> <p>1.2. External requirements for chemical use are identified and relevant information obtained and interpreted.</p> <p>1.3. Requirements for chemical use are documented.</p> <p>1.4. Chemicals available to meet requirements are identified and information concerning their application is reviewed.</p>
2. Develop a chemical use risk management strategy	<p>2.1. Hazards in the transportation, storage and handling of chemicals are identified and assessed.</p> <p>2.2. Risk factors associated with the use of chemicals are identified and documented.</p> <p>2.3. Risk control measures are identified and developed in accordance with regulatory requirements.</p> <p>2.4. A risk management strategy for chemical use is developed in accordance with legislation and IPM, IRM, and Integrated Animal Health Management principles.</p> <p>2.5. Appropriate insurance policies covering intended chemical use are researched and documented according to enterprise guidelines.</p>
3. Develop and implement procedures for chemical management and use	<p>3.1. Procedures for management and use of chemicals are developed in accordance with directions and standards.</p> <p>3.2. Required precautions and risk control measures are documented.</p> <p>3.3. Procedures for communicating and negotiating with the community are developed.</p> <p>3.4. Information on procedures and precautions in the management and use of chemicals is distributed to relevant staff.</p>
4. Identify training and supervision needs and solutions for chemical use in the workplace	<p>4.1. An appropriate strategy is developed for the training, assessment and supervision of staff involved in chemical use including correct use/fit of personal protective equipment.</p> <p>4.2. Suitable internal on-the-job training and monitoring of performance in the implementation of the chemical use strategy is organised and provided.</p> <p>4.3. Appropriate external training and assessment in the</p>

ELEMENT	PERFORMANCE CRITERIA
	management and use of chemicals is organised.
5. Monitor and evaluate the implementation of a chemical use strategy	5.1. The implementation of the established chemical use strategy is monitored in terms of regulatory requirements and established criteria. 5.2. The effectiveness of the established chemical use strategy is evaluated. 5.3. Appropriate action is initiated where there are identified problems or where required procedures/precautions are not being correctly followed.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- accurately read and interpret labels on chemicals and Materials Safety Data Sheets (MSDSs)
- determine the level of hazard and risk associated with chemical use in terms of human health, environment, fauna, flora and produce
- apply risk management techniques
- develop and evaluate management plans and organisational procedures
- use literacy skills to fulfil job roles as required by the organisation. The level of skill may range from reading and understanding documentation to completion of written reports
- use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views
- use numeracy skills to estimate, calculate and record complex workplace measures
- use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

#### Required knowledge

- hazards to human health, agricultural produce, and all aspects of the environment and non-target species of flora and fauna associated with the transport, storage, handling, application and disposal of chemicals
- factors that contribute to spray drift, measures to assess the potential for spray drift

**REQUIRED SKILLS AND KNOWLEDGE**

and prevent or control its occurrence, and the elements of a spray drift management strategy

- routes of entry of chemicals into the body and the implications of this on chemical use management strategies
- safety procedures including the maintenance, use, fit and decontamination of personal protective clothing and equipment
- influence of meteorological factors (temperature, humidity, rain) on quality of chemical application, drift potential, effectiveness and efficacy of use
- precautions and risk control measures that may be used to minimise risks and hazards associated with the use of chemicals
- principles of IPM/IRM/IAM and their benefits in terms of chemical use risk management
- emergency procedures for safety incidents involving chemicals
- requirements and options for the keeping of records on chemical use and equipment maintenance and repair.
- principles of residue effects and their management including persistence in soil and water, accumulation in agricultural produce, rate of breakdown of residues in produce and in the environment, withholding periods, and ways in which residues can occur
- movement of and persistence and degradation of different types of chemicals in various areas of the environment such as soil, air and water
- industry waste agreements, for example drum MUSTER, and Chem Collect
- OHS legislative requirements and Codes of Practice
- appropriate insurances covering chemical use, transportation and storage
- correct wearing/fit of personal protective equipment
- use of chemicals as part of a comprehensive Quality Assurance (QA) system, Industry QA programs and performance standards.

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

#### Overview of assessment

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following:

- legislation, Codes of practice and industry requirements covering OHS, hazardous substances, environment and food safety/market access requirements related to the use of chemicals use have been incorporated into enterprise procedures
- the role of chemical labels and MSDSs has been conveyed to staff and the information on them used in determining chemical transport, storage, handling, application, and disposal procedures and practices in the workplace. MSDSs are held for all agricultural chemicals transported, stored or used in the workplace and relevant staff have been given access
- procedures have been put in place to assess the risk of chemical transport, storage, handling, application and disposal to human health, environment, fauna and flora, and market acceptability of produce.
- label and MSDSs for each chemical have been developed and distributed to all affected staff a communication strategy has been put in place to remind relevant staff of their responsibilities in chemical use, to inform all staff exposed to agricultural chemicals of the need to minimise exposure and how to act in a chemical emergency, to inform neighbours when chemical spraying is planned to take place, and to make agencies aware when a chemical spill has occurred.
- an induction program has been developed that covers the enterprise OHS system and roles and responsibilities of all workers within that system
- the roles and responsibilities of all staff handling or applying farm chemicals has been documented and training needs and completions have been recorded

**EVIDENCE GUIDE**

	<p>for each staff member</p> <ul style="list-style-type: none"> <li>• health monitoring of staff exposed to chemicals has been carried out according to regulatory requirements</li> <li>• the need for chemical application and selection of chemicals for a purpose is in line with the enterprises documented IPM and IRM strategies</li> <li>• application techniques selected are based on spray drift management principles, accurate placement of chemical, and the correct use of PPE</li> <li>• application to authorities has been made in the case of off label use and all conditions and requirements on permits have been implemented</li> <li>• chemical application is carried out by trained staff as required by legislation</li> <li>• all withholding periods and requirements to limit access to sprayed areas have been met and can be supported by the organisations recording system</li> <li>• chemical storage systems meet industry and legislative requirements and access to storage areas is covered by enterprise procedures</li> <li>• chemical emergency procedures have been documented, displayed and conveyed to staff</li> <li>• all requirements for chemical signage have been met for the transport and storage of chemicals and for areas affected by chemical application</li> <li>• chemical persistence in vegetation, soil and water has been accounted for in managing environmental risk</li> <li>• recording procedures have been developed and maintained covering all aspects of the transport, storage, handling, application and disposal of chemicals in the workplace</li> <li>• reviews of chemical procedures based on enterprise records have been conducted periodically and, where issues have emerged, necessary changes made and communicated to staff.</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<p>Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances. Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.</p>



## Range Statement

<b>RANGE STATEMENT</b>	
The range statement relates to the unit of competency as a whole.	
Chemicals may include:	<ul style="list-style-type: none"> <li>• insecticides</li> <li>• fungicides</li> <li>• herbicides</li> <li>• bactericides</li> <li>• algaecides</li> <li>• biologicals</li> <li>• nematocides</li> <li>• rodenticides</li> <li>• fumigants</li> <li>• antimicrobial agents</li> <li>• anthelmintics</li> <li>• hormone growth promotants</li> <li>• the range of veterinary chemicals used to treat animals for disease.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Chemicals
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## Co-requisite units

<b>Co-requisite units</b>	

## Competency field

Competency field	
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