



Australian Government

AHCMOM315 Operate chemical application machinery and equipment

Release: 2

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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 operate machinery and equipment used for specialised liquid and granular chemical application in agriculture and horticulture sectors.

This unit applies to individuals who apply legislative and regulatory requirements and operating principles to chemical application machinery and equipment operation under broad direction, and take responsibility for their own work.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Machinery operation and maintenance (MOM)

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. Prepare chemical application machinery for use	1.1 Confirm activity to be undertaken, including identifying potential hazards and risks and implementing safe working practices to manage risks

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Source and interpret relevant chemical application machinery and equipment operation and maintenance manual and manufacturer instructions 1.3 Identify and interpret safety data sheets relevant to chemicals to be used and applied 1.4 Select and maintain personal protective equipment according to workplace procedures 1.5 Fit and use personal protective equipment according to job requirements and applicable to task to be undertaken 1.6 Conduct chemical application machinery and equipment routine pre-operational checks 1.7 Document damaged or worn components and organise for replacement according to workplace procedures 1.8 Set up and calibrate equipment according to application plan 1.9 Attach ancillary equipment and check for correct operation 1.10 Record pre-operational checks according to workplace procedures
2. Operate chemical application machinery and equipment	2.1 Operate chemical application machinery and equipment in a safe, controlled and efficient manner and monitor for performance and efficiency 2.2 Operate chemical application machinery according to operation and maintenance manual, manufacturer specifications, task requirements and regulatory requirements 2.3 Identify environmental and biosecurity implications associated with chemical application and minimise impact 2.4 Continually monitor hazards and risks, and ensure safety of self, other personnel and equipment 2.5 Assess and minimise spray drift risk 2.6 Monitor meteorological conditions before and during chemical application and respond to changed conditions
3. Complete work	3.1 Conduct shut down procedures for chemical application machinery and equipment 3.2 Flush and clean components according to manufacturer specifications and chemical label requirements 3.3 Perform routine operational servicing and minor maintenance 3.4 Identify and report malfunctions, faults, irregular performance or

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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>
	damage according to workplace procedures 3.5 Clean, store and secure chemical application machinery and equipment 3.6 Complete operational records according to 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	Interpret textual information from a range of sources to identify relevant and key information about workplace operations
Writing	- Document chemical application machinery use - Complete operational records
Oral communication	Use clear language to report malfunctions, faults, irregular performance or damage
Numeracy	- Estimate, calculate and record quantities of liquid and/or granular chemicals - Identify correct tyre pressure
Navigate the world of work	Recognise and follow workplace requirements, including safety requirements, associated with own role and area of responsibility

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Chemical application machinery and equipment must include at least one of the	- specialised liquid chemical application machinery - specialised granular application machinery - machinery and equipment used for crop protection and pest
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following:	management.
Personal protective equipment must include:	• protective clothing • respirators • protective eyewear • unlined rubber or plastic gloves • neoprene or nitrile boots.
Pre-operational checks must include:	• machine damage and serviceability • checking for missing parts • condition of tyres.
Biosecurity implications must include:	• control of cross-site contamination.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCMOM315 Operate chemical application machinery and equipment Release 2	AHCMOM315 Operate chemical application machinery and equipment Release 1	Minor changes to performance criteria, foundation skills and range of conditions	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 AHCMOM315 Operate chemical application machinery and 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 calibrated, operated and cleaned specialised liquid or granular chemical application machinery and equipment and has:

- identified hazards and implemented safe workplace practices and procedures
- carried out chemical application machinery and equipment pre-operational checks according to operation and maintenance manual
- sourced and interpreted relevant Safety Data Sheets (SDS)
- performed minor maintenance
- recognised and documented defects in chemical application machinery and equipment and operational capacity
- attached and detached ancillary equipment
- calibrated and set up application components
- operated chemical application machinery according to operation and maintenance manual, manufacturer specifications, task requirements and regulatory requirements
- assessed and minimised spray drift risk
- completed operational records according to legislative and regulatory requirements
- minimised environmental impacts associated with chemical application machinery and equipment operation
- followed industry and workplace biosecurity procedures
- applied workplace health and safety 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:

- hazards and risks associated with chemical application machinery and equipment operations
- categories of information contained in SDS
- chemical application machinery and equipment components, controls, features, technical capabilities and limitations
- manufacturer requirements and workplace requirements for:
 - pre-operational checks
 - machinery operation techniques
 - operator level servicing
 - planned and emergency shut down procedures
- features and functions of chemical application equipment components, including:
 - liquid spray; nozzles, tanks, agitation systems, pumps, filters, pressure regulation valves
 - granular applicators/dusters; hoppers, flow control valves
- effects of meteorological conditions on chemical application
- legislative and regulatory requirements applicable to chemical application
- workplace procedures applicable to health and safety in the workplace for chemical application machinery and equipment operation
- environmental impacts associated with operating chemical application machinery and equipment including spray drift
- industry and workplace biosecurity procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
 - individual must not be under the influence of alcohol or drugs
 - individual must not be taking any medication (prescribed or otherwise) that may impair judgement
 - individual must not be in a fatigued state when operating chemical application machinery
- resources, equipment and materials:
 - chemical application machinery and equipment
 - protective clothing
 - respirators
 - protective eyewear
 - unlined rubber or plastic gloves
 - neoprene or nitrile boots
 - safety equipment and personal protective equipment applicable to the task being undertaken
- specifications:

- chemical application machinery and equipment operation and maintenance manuals and manufacturer specifications
- legislative and regulatory requirements applicable to chemical application
- industry and workplace biosecurity procedures applicable to chemical application
- timeframes:
 - according to the job requirements.

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

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