



Australian Government

AHCCOM403 Develop a composting recipe

Release: 1

AHCCOM403 Develop a composting recipe

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 9.0.

Application

This unit of competency describes the skills and knowledge required to prepare and mix raw materials of known characteristics in specified proportions for composting.

The unit applies to individuals who take responsibility for own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources.

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

Pre-requisite Unit

Nil

Unit Sector

Composting (COM)

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. Identify and characterise raw materials	1.1 Identify raw materials against established workplace criteria 1.2 Enter raw material characteristics into compost recipe calculator to achieve a balanced recipe 1.3 Take samples of material for analysis where raw material identity or characteristics are uncertain 1.4 Determine receivable and handling requirements of raw materials
2. Establish production	2.1 Develop product specifications for identified markets using

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
objectives	product performance data and enterprise records 2.2 Identify raw material combinations that meet market requirements
3. Calculate compost recipe	3.1 Record raw material characteristics in compost recipe 3.2 Specify raw material ratios by weight in resulting compost recipe 3.3 Determine raw material pre-processing requirements, volumes of compost upon formation, and compost production plan 3.4 Review and document composting batch management procedures 3.5 Estimate and document compost production schedule 3.6 Verify compost recipe and production schedule against compost production plan 3.7 Quantify density of pre-processed raw materials and translate weight-based recipe into volume-based recipe for production 3.8 Record volumetric compost recipe and production procedures as operational batch or bucket recipe and procedures
4. Validate compost recipe	4.1 Prepare and mix raw materials to form feedstock for composting 4.2 Supervise composting batch according to workplace procedure 4.3 Monitor composting process for efficiency in relation to estimated production schedule and workplace requirements 4.4 Monitor environmental and health and safety aspects and impacts 4.5 Identify faults, variations or problems, and implement remedial action 4.6 Sample and test material to determine completion of process 4.7 Evaluate end product quality against product specifications 4.8 Revise compost recipe, production schedule and procedures

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
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Skill	Description
Numeracy	Perform calculations to a high degree of accuracy to ensure quality and repetition of compost recipe and outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCCOM403 Develop a composting recipe	AHCCOM401 Develop a composting recipe	Minor changes to Application and Performance Criteria, Performance Evidence, Knowledge Evidence and Assessment Conditions for clarity Foundation Skills added	Equivalent

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 AHCCOM403 Develop a composting recipe

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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 the individual has, on at least one occasion, prepared a mix of raw materials in specified proportions for a composting recipe and has:

- calculated a compost recipe consistent with technology and method available from combinations of raw materials
- documented compost production plan consistent with plant capabilities and site constraints
- produced a compost recipe that achieves defined product specifications.

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:

- principles and practices of compost recipes, including:
 - range of commercial compost-based products
 - raw materials and their characteristics
 - processing duration required for various raw materials
 - relationship between key compost recipe variables and compost production
 - systems, technologies and methods in compost production
 - quality standards and organic certification requirements for compost products
- control of hazards in handling raw materials and composting materials.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:

- skills must be demonstrated on a farm or a commercial composting site or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - tools, equipment and machinery for developing compost
 - personal protective equipment
 - raw materials for compost
- specifications:
 - workplace policies, procedures, processes
 - manufacturer operating instructions for equipment and machinery
 - product specifications.

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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