



Australian Government

Department of Education, Employment and Workplace Relations

AHCPHT307A Prepare raw materials and compost the feedstocks

Release: 1

AHCPTH307A Prepare raw materials and compost the feedstocks

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of preparing and mixing raw materials into a suitable feedstock mixture for commercial-scale composting, and composting feedstock mixtures to manufacture compost products and defines the standard required to: prepare raw materials for composting according to enterprise product requirements; prepare batches for composting according to defined compost recipes; compost feedstock mixtures to manufacture compost; conduct and interpret basic field test results to confirm effective processing and define intervention required to rectify composting processes; establish and maintain appropriate compost batch documentation accurately and promptly.
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Application of the Unit

Application of the unit	This unit applies to an employee of an enterprise engaged in commercial-scale composting operations. Work is likely to be performed as a part of a team and under the supervision of a site manager or operations manager. Where work requires the use of load-shifting or other equipment, appropriate training / certification must be provided according to state and territory safety and licensing requirements.
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Licensing/Regulatory Information

Refer to Application of the Unit

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

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1. Organise for processing	1.1. Job sheet is reviewed to clearly identify all processing requirements. 1.2. Machinery, equipment and materials appropriate to the job requirements are selected and checked for serviceability and safe operation. 1.3. Potential Occupational Health and Safety (OHS) hazards are identified and assessed, and appropriate action is taken to minimise risk to self and others. 1.4. Suitable Personal Protective Equipment (PPE) is selected, fitted, used, maintained and stored according to work requirements, manufacturer specifications and enterprise procedures. 1.5. Enterprise OHS guidelines are complied with.
2. Prepare raw materials and compost the feedstock mixture	2.1. Raw materials and additives for processing are identified, collected and checked to ensure compliance with enterprise procedures, including assessment of physical contamination according to enterprise guidelines. 2.2. Composting technology and methods to be used are confirmed as appropriate to raw material types and enterprise product requirements. 2.3. Raw materials are variously pre-processed into suitable forms for composting according to enterprise product requirements. 2.4. Pre-processed raw materials are mixed into suitable feedstock mixtures for composting according to documented recipes or batches. 2.5. Feedstock mixtures for composting are handled according to technology, appropriate method, and industry best practice and enterprise procedures. 2.6. Batch numbers or codes are assigned and batch documentation is created to enable tracking of batch through compost production cycle.
3. Monitor composting process	3.1. Composting batch is monitored by observation and use of field testing equipment to maintain effective composting process and efficient compost production schedule according to relevant Australian standards for the product. 3.2. Processing and operations records are maintained for process control and to track batch through the compost production cycle. 3.3. Faults or variations observed at any stage of process are reported to supervisor and remedial action is

ELEMENT	PERFORMANCE CRITERIA
	taken to maintain effective and consistent compost production.
4. Conduct quality control inspection	4.1. Finished compost is inspected and assessed for compliance with enterprise product requirements and relevant Australian standards. 4.2. Faults or variations observed are reported to supervisor. 4.3. Non-compliant product is further processed with necessary adjustments made as directed to processing technique and compost batch management to achieve compliance with product quality requirements. 4.4. Compliance of compost batch with product requirements is confirmed. 4.5. Batch documentation is completed for compliant compost product. 4.6. Sales and operational staff members are informed that product is suitable for sale and/or preparation of value-added products. 4.7. Work outcomes are reported to supervisor, feedback on performance is sought and any required improvements are noted for future action.
5. Clean up area	5.1. Loading-shifting machinery and other processing equipment are cleared and cleaned as required to avoid contamination between batches. 5.2. Raw materials and finished compost products are cleared away to designated areas, and processing site is cleaned to ensure safe and effective future operation according to enterprise procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- identifying hazards and implementing safe operating procedures
- establishing and maintaining compost batch documentation
- conducting basic field tests according to specified procedures
- operating equipment safely and efficiently

REQUIRED SKILLS AND KNOWLEDGE

- identifying and handling raw materials and products
- preparing batches for composting according to defined compost recipes
- preparing raw materials in accordance with enterprise product requirements
- use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- awareness of compost quality standards
- basic principles of composting science as related to commercial compost production
- characteristics of a range of raw materials
- fundamental characteristics of compost quality
- steps in pre-processing compost materials
- batch documentation techniques
- key process control stages critical to consistent compost production
- overview of systems and technologies used in compost production, particularly as relevant to candidate's workplace
- range and characteristics of categories of compost product.

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: • prepare raw materials for composting according to enterprise product requirements • prepare batches for composting according to defined compost recipes • conduct and interpret basic field test results to confirm effective processing and define intervention required to rectify composting processes • establish and maintain appropriate compost batch documentation accurately and promptly.
Context of and specific resources for assessment	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.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Composting technology may include:	• both aerobic and vermiculture composting technologies.

Unit Sector(s)

Unit sector	Production horticulture
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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