Title	Establish vermicomposting units for resource recovery activity and maintain the environment and microbiology		
Level	3	Credits	5

Purpose	This unit standard is for people working in, or who wish to work in resource recovery vermicomposting.
	People credited with this unit standard are able to establish vermicomposting units for resource recovery activity, and maintain the environment and microbiology, for a vermicomposting unit.

Classification	Resource Recovery > Composting	248

Available grade	Achieved	1/5	

Guidance Information

- All work practices must comply with the: Health and Safety at Work Act 2015; Resource Management Act 1991; Hazardous Substances and New Organisms Act 1996; NZS 4454:2005 Composts, soil conditioners and mulches; and The New Zealand Waste Strategy: Reducing Harm, Improving Efficiency 2010 Ministry for the Environment, available at http://www.mfe.govt.nz.
- Personal protective equipment (PPE) must be used throughout operations in accordance with company procedures. PPE includes but is not limited to gloves, eye protection, appropriate footwear, overalls, hearing protection, respirator or facemask, high visibility clothing, fire extinguisher, first aid kit, eye wash kit, face shield/mask; hard hat.

3 Definitions

Company procedures mean the documented methods for performing work activities and include health and safety, environmental, and quality management requirements. They may refer to manuals, codes of practice, or policy statements.

Feedstock is a mixture of organic materials that form the food for worms in a vermicomposting unit.

Optimum environment includes moisture content, feedstock, drainage, aeration, temperature, covers, and microbiology.

Vermicomposting refers to a mixture of vermicast and unprocessed organic matter; it may also contain worm capsules and small worms. The term may also apply to a mix of vermicast and composted material.

A vermicomposting unit is made up of a bed in which worms are placed, and worm cast and (depending on the type of unit) liquid fertilizer is produced. The bed may include a combination of – of aged manures or composted materials, shredded paper products, decomposing leaves, straw, soil, vegetable or fruit discard materials.

Outcomes and performance criteria

Outcome 1

Establish vermicomposting units for resource recovery.

Range evidence is required for two vermicomposting units.

Performance criteria

- 1.1 Vermicomposting units are established in accordance with size and availability of site, availability of feedstock, and worms.
- 1.2 Vermicomposting units are established to meet the requirements of organic compost development.

Range

moisture content, feedstock, drainage, aeration, temperature, covers, contamination, drainage, aeration, and microbiology; make-up of base (bedding) may include but is not limited to a combination of – aged manures; shredded paper products; decomposing leaves; straw; soil or mature compost.

Outcome 2

Maintain the environment and microbiology for a vermicomposting unit.

Performance criteria

2.1 The optimum environment required for compost development is maintained to ensure the health and vitality of the worms and the vermicomposting unit.

Range environment – moisture content, feedstock, drainage, aeration,

temperature, covers, microbiology.

2.2 Beneficial microbiology is maintained to ensure continuous compost development.

Range elimination of – contamination, animal and plant pathogens.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 April 2007	31 December 2025
Rollover and Revision	2	28 March 2019	31 December 2025
Review	3	27 March 2025	31 December 2025

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.