



# **Resource Recovery Exemption under Part 9, Clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014**

## **The Closed Loop rapidly decomposed food waste exemption June 2021**

### **Introduction**

This exemption:

- is issued by the Environment Protection Authority (EPA) under clauses 91 and 92 of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation); and
- exempts a consumer of rapidly decomposed food waste produced by specified Closed Loop units from certain requirements under the *Protection of the Environment Operations Act 1997* (POEO Act) and the Waste Regulation in relation to the application of rapidly decomposed food waste to land, provided the consumer complies with the conditions of this exemption.

This exemption should be read in conjunction with 'the Closed Loop rapidly decomposed food waste order June 2021'.

### **1. Waste to which this exemption applies**

- 1.1. This exemption applies to rapidly decomposed food waste processed in the specified Closed Loop units, which is, or is intended to be, applied to land as a soil amendment.
- 1.2. Rapidly decomposed food waste means the decomposed output from the mechanical mixing and heating of food waste produced by specified Closed Loop units.

### **2. Persons to whom this exemption applies**

- 2.1. This exemption applies to any person who applies, or intends to apply, rapidly decomposed food waste to land as set out in 1.1.

### **3. Duration**

- 3.1. This exemption commences on 29 June 2021 and is valid until 29 June 2022 unless revoked by the EPA by notice published in the Government Gazette at an earlier date.

## **4. Premises to which this exemption applies**

- 4.1. This exemption applies to premises at which the consumer's actual or intended application of rapidly decomposed food waste is carried out.

## **5. Exemption**

- 5.1. Subject to the conditions of this exemption, the EPA exempts each consumer from the following provisions of the POEO Act and the Waste Regulation in relation to the consumer's actual or intended application of rapidly decomposed food waste to land as a soil amendment at the premises:
- section 48 of the POEO Act in respect of the scheduled activities described in clauses 39 and 42 of Schedule 1 of the POEO Act;
  - Part 4 of the Waste Regulation;
  - section 88 of the POEO Act; and
  - clause 109 and 110 of the Waste Regulation.
- 5.2. The exemption does not apply in circumstances where rapidly decomposed food waste is received at the premises for which the consumer holds a licence under the POEO Act that authorises the carrying out of the scheduled activities on the premises under clause 39 'waste disposal (application to land)' or clause 40 'waste disposal (thermal treatment)' of Schedule 1 of the POEO Act.

## **6. Conditions of exemption**

The exemption is subject to the following conditions:

### **General conditions**

- 6.1. At the time the rapidly decomposed food waste is received at the premises, the material must meet all chemical and other material requirements which are required on or before the supply of rapidly decomposed food waste under 'the Closed Loop rapidly decomposed food waste order June 2021'.
- 6.2. The rapidly decomposed food waste can only be applied to land as a soil amendment on agricultural land, home gardens and for the purposes of landscaping. Food crops, where the harvested parts touch or are below the surface of the land, must not be grown at the land application site for 90 days after each application of rapidly decomposed food waste.
- 6.3. The rapidly decomposed food waste must not be land applied at high public contact sites, such as childcare centres and children's playgrounds<sup>1</sup>.
- 6.4. The rapidly decomposed food waste must be incorporated into the topsoil at the time of application.
- 6.5. The rapidly decomposed food waste can be used as an input material at the start of a composting process as defined in 'the Compost Order 2016'.
- 6.6. The consumer must make any records required to be kept under this exemption available to authorised officers of the EPA on request.

### **Preventing leaching and exposure to vectors**

- 6.7. The consumer must ensure that the rapidly decomposed food waste is appropriately contained prior to land application and when applying it to land, such that leaching or runoff from rapidly decomposed food waste is prevented.

<sup>1</sup>The purpose of this condition is to avoid hand-to-mouth contact with soil in which rapidly decomposed food waste has been applied, especially for children and other vulnerable members of the community.

- 6.8. The consumer must ensure minimal risk of exposure to and transfer of pathogenic materials from the site by vectors (animals, birds and insects).
- 6.9. The consumer must ensure that any application of rapidly decomposed food waste to land occurs within a reasonable period of time after its receipt.

#### **Livestock related**

- 6.10. The consumer must not allow rapidly decomposed food waste to be fed to or come into contact with pigs or ruminants in accordance with clauses 37 and 38 of the *Biosecurity Regulation 2017*.
- 6.11. The consumer must apply a livestock-withholding period of 90 days following the land application of rapidly decomposed food waste.

#### **Additional agricultural conditions**

- 6.12. When used on agricultural land, the consumer must calculate application rates prior to the application of the rapidly decomposed food waste to land. The application rates must be equal to or less than the rate for the most limiting factor.
- 6.13. Where rapidly decomposed food waste is intended to be land applied within 4 weeks of any other exempted waste, an investigation to determine the suitability of the proposed application must be undertaken prior to the waste being received at the application site. A report must be prepared including, but not necessarily limited to, information detailing how the receiving site will benefit from multiple wastes being applied, how the matrices and constituents of the different wastes will interact, and what application rates will be appropriate to minimise the potential for environmental harm. The investigation should determine whether the land application will deliver a net benefit. Where a net benefit is not demonstrated the land application of rapidly decomposed food waste must not proceed. A written record of the report must be kept for a minimum period of three years.
- 6.14. When used on agricultural land, the consumer must keep a written record of the following for a period of six years:
  - the quantity of any rapidly decomposed food waste received; and
  - the name and address of the supplier of the rapidly decomposed food waste received.

## **7. Definitions**

In this exemption:

**agricultural land** means land where the current or future use is for the purposes of agriculture which includes horticulture, turf and any purpose of husbandry. This includes keeping or breeding livestock, poultry or bees, and growing fruit, vegetables, field crops or pastures.

**animal waste** means dead animals and animal parts and any mixture of dead animals and animal parts.

**application or apply to land** means applying to land by:

- spraying, spreading or depositing on the land; or
- ploughing, injecting or mixing into the land; or
- filling, raising, reclaiming or contouring the land.

**consumer** means a person who applies, or intends to apply, rapidly decomposed food waste to land.

**ruminant** means an animal that has a rumen including, but not limited to, alpacas, camels, cattle, deer, goats and sheep as defined in Clause 3(1) Part 1 of the *Biosecurity Regulation 2017*.

**food waste** means food waste from the manufacture, preparation, sale or consumption of food but does not include grease trap waste or animal waste.

**high public contact sites** means land with a high potential for soil to mouth contact by the public, particularly children, including childcare centres and playgrounds.

**Closed Loop unit** means the “CLO units” by Closed Loop Environmental Solutions Pty Ltd. The CLO unit is an enclosed vessel that uses a start-up culture of aerobic thermophilic bacteria and operates with agitation, forced airflow and an internal temperature of 60<sup>0</sup>C to 63<sup>0</sup>C (achieved by way of a jacketed external oil chamber maintained at 120<sup>0</sup>C) for a minimum period of 24 hours.

**processor** means a person who produces rapidly decomposed food waste for supply to a consumer from the specified units in this exemption.



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## Notes

The EPA may amend or revoke this exemption at any time. It is the responsibility of the consumer to ensure they comply with all relevant requirements of the most current exemption. The current version of this exemption will be available on [www.epa.nsw.gov.au](http://www.epa.nsw.gov.au)

In gazetting or otherwise issuing this exemption, the EPA is not in any way endorsing the use of this substance or guaranteeing that the substance will confer benefit.

The conditions set out in this exemption are designed to minimise the risk of potential harm to the environment, human health or agriculture, although neither this exemption nor the accompanying order guarantee that the environment, human health or agriculture will not be harmed.

Animal waste is defined as dead animals and animal parts and any mixture of these. Under the food waste definition in this exemption, it is intended that for example, meat waste from commercial kitchens and plate scrapings would be considered as food waste. However, animal carcasses or parts of animals from an animal slaughtering process are excluded.

Rapidly decomposed food waste is a decomposed material from the mechanical mixing and heating of food waste and is **not** the same as compost. Consumers should note that re-wetting of rapidly decomposed food waste will encourage growth of organisms that may remain in a dormant state after the process is completed. The output itself will sustain the growth of organisms, including pathogenic organisms, which are introduced from the receiving environment. Rewetting will also commence the usual decomposition process that occurs with all organic waste and has the potential to generate offensive odours.

Note that food crop restrictions apply in this exemption to prevent the transmission of pathogenic organisms from the soil to food. Food crops that when harvested come into contact with the soil such as carrots, potatoes, lettuces and leafy herbs, must not be grown in soil where decomposed food waste has been land applied for a period of less than 90 days after each application. However, the output material may be used for the growing of fruit or nut trees or vines at any time after land application but not where fallen produce is or may be collected off the ground within 90 days of application.

Rapidly decomposed food waste may be acidic and contain high levels of sodium and other salts. The consumer should assess whether or not the rapidly decomposed food waste is fit for the purpose for which it is proposed to be used, and whether this use will cause harm. The consumer may need to seek expert technical advice.

As rapidly decomposed food waste is dry and may contain powdery particles, care should be taken to reduce dust during handling and application.

Regardless of any exemption provided by the EPA, the person who causes or permits the application of the substance to land must ensure that the action is lawful and consistent with any other legislative requirements including, if applicable, any development consent(s) for managing operations on the site(s).

The receipt of rapidly decomposed food waste remains subject to other relevant environmental regulations in the POEO Act and the Waste Regulation. For example, a person who pollutes land (s. 142A) or water (s. 120), or causes air pollution through the emission of odours (s. 126), or does not meet the special requirements for asbestos waste (Part 7 of the Waste Regulation), regardless of having an exemption, is guilty of an offence and subject to prosecution.

This exemption does not alter the requirements of any other relevant legislation that must be met when land applying this material, including, but not limited to the *Biosecurity Act 2015* and *Biosecurity Regulation 2017*.

Failure to comply with the conditions of this exemption constitutes an offence under clause 91 of the Waste Regulation.