

Rapidly decomposed or dehydrated food waste and the EPA resource recovery framework



Rapidly decomposed or dehydrated food waste is the output produced by machines that process food waste in a short period, usually less than 24 hours, by actively heating and mixing the waste in the presence of air. This is done with or without the addition of microbes.

Who should read this fact sheet?

You should read this fact sheet if:

- your business generates food waste and you are considering, or are already using rapid decomposition or dehydration units
- you receive or intend to receive the output produced from these units
- you are a council or planning authority that regulates businesses that generate food waste
- your unit is funded through a grant under the EPA's *Waste Less, Recycle More* programs.

Why is this important?

Rapidly decomposed or dehydrated food waste is not compost. It is either partially decomposed, or has simply been dehydrated. Re-wetting this output will restart the usual decomposition process that occurs with all organic waste and can generate offensive odours.

Re-wetting will also encourage the growth of micro-organisms that may remain viable in the output after the process is completed. When applied to land, this waste can also encourage organisms in the soil, including pathogens, to multiply.

Regulatory framework for waste in NSW

The land application of all waste, including rapidly decomposed or dehydrated food waste, is considered waste disposal under Schedule 1 of the *Protection of the Environment Operations Act 1997*. This means if you apply this waste to land, you may be considered to be operating as a landfill and may need to hold an Environment Protection Licence.

However, the EPA has the power to exempt people from certain requirements through Orders and Exemptions. The exemption power aims to allow the re-use of waste materials when these can be shown to provide a benefit, be fit-for-purpose and pose minimal risk of harm to the environment and human health.

Resource Recovery Orders and Exemptions

The EPA Orders and Exemptions for rapidly decomposed or dehydrated food allow the lawful land application of this waste as a soil amendment, when all conditions are met. The Orders and Exemptions are specific to certain types of rapid decomposition or dehydration units and certain kinds of waste. Other similar machines are not covered by the Orders and Exemptions. New applications can be made by contacting the EPA.

As at January 2017, three Orders and Exemptions have been granted for rapid decomposition and dehydration machines supplied by Closed Loop, Eco Guardians and GreenTech Industries. The current Orders and Exemptions are available on the EPA's website at www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm.

If the machine that you intend to use is not specified in the Orders and Exemptions, or the machine is specified but you cannot comply with the conditions, then you cannot lawfully apply the output to land outside the boundary of your premises (off-site). Note that applying non-compliant output on your own premises (on-site) may still pose a risk to the environment and human health. If your unit is funded through an EPA grant, then the conditions of any

relevant Order and Exemption must be met whether the waste is re-used off-site or on-site. Off-site transport of the output is allowed without reference to the Orders and Exemptions if it is further treated in a facility that can lawfully receive it, or be disposed of at a lawful landfill.

You do not need to comply with these Orders and Exemptions if you use rapidly decomposed or dehydrated food waste as input material at the start of a composting process that meets the conditions of the Compost Order 2016 (www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm).

Key conditions for rapidly decomposed or dehydrated food waste

The Orders set conditions for how food waste must be processed in the units, and the Exemptions set conditions for how the outputs must be used.

The owner or lessee of the machine is the 'processor' and is responsible for meeting all the conditions of the Order. The person applying the outputs to land is the 'consumer' and is responsible for complying with the conditions of the Exemption. In many cases, because of the nature of the equipment, the two are one and the same. However, all the required conditions must be met.

Allowed inputs

Input material to the units must be only food waste from the manufacture, preparation, sale or consumption of food. It does not include grease trap waste or animal waste (e.g. animal carcasses or parts of animals from abattoirs). Meat waste from plate scraping or food preparation such as in restaurants is allowed. Physical contaminants such as plastics (including serving ware that are biodegradable or not), polystyrene, metals and glass are not permitted inputs.

Supply of the rapidly decomposed or dehydrated food waste to a consumer

Before the output is supplied to a consumer, the owner or lessee of the machine must:

- ensure the unit has completed at least one full operational cycle (without additional input of food waste) before removing the final output
- prepare a sampling plan and conduct testing of the final output as specified in the relevant Order
- provide the consumer written confirmation that all conditions of the relevant Order are met
- provide the consumer a copy of the relevant Exemption and Order or a link to the EPA website where these can be found, so they know how to handle the material correctly.

Use of rapidly decomposed or dehydrated food waste by consumers

Consumers must comply with the conditions of the relevant Exemption to be able to apply this output to land.

- The output must be incorporated into the topsoil, not just surface applied.
- The output can be used in agriculture, home gardens and landscaping. If it is applied to land to grow food that comes into direct contact with the soil (such as carrots, lettuces and leafy herbs), the consumer must wait 90 days* before planting to minimise potential health risks.
- The output can be incorporated into soil around fruit or nut trees or vines at any time. Fallen produce must not be collected off the ground for 90 days* after each application.
- The output must **not be used** in high-contact public sites such as **childcare centres**. This is to avoid soil-to-mouth infection routes.
- The output must not come into contact with pigs or ruminants (alpacas, camels, sheep, cattle, goats or deer). This is required to reduce biosecurity risks: for more information visit www.dpi.nsw.gov.au/biosecurity.
- Pigs and ruminants must not graze on land to which the output has been applied, for 90 days* following the land application (to reduce biosecurity risks).
- The output must be stored in a way that does not attract vermin.

*Note: All withholding periods apply from the time the output is incorporated into the soil.

Need more information?

For more on resource recovery visit www.epa.nsw.gov.au/wasteregulation/recovery-exemptions.htm.

Call the NSW EPA's Environment Line on 131 555 or email waste.exemptions@epa.nsw.gov.au.

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