



Resource Recovery Order under Part 9, Clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014

The pasteurised garden organics order 2016

Introduction

This order, issued by the Environment Protection Authority (EPA) under clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014 (Waste Regulation), imposes the requirements that must be met by suppliers of pasteurised garden organics to which 'the pasteurised garden organics exemption 2016' applies. The requirements in this order apply in relation to the supply of pasteurised garden organics for application to land as a soil amendment.

1. Waste to which this order applies

- 1.1. This order applies to pasteurised garden organics. In this order, **pasteurised garden organics** means mulch and/or garden organics that have undergone the process of pasteurisation as a minimum.

2. Persons to whom this order applies

- 2.1. The requirements in this order apply, as relevant, to any person who supplies pasteurised garden organics that has been generated, processed or recovered by the person.
- 2.2. This order does not apply to the supply of pasteurised garden organics to a consumer for land application at a 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.

3. Duration

- 3.1. This order commences on 25 April 2016 and is valid until revoked by the EPA by notice published in the Government Gazette.

4. Revocation

- 4.1. 'The pasteurised garden organics order 2014' which commenced on 24 November 2014 is revoked from 25 April 2016.

5. Processor requirements

The EPA imposes the following requirements on any processor who supplies pasteurised garden organics.

General conditions

- 5.1. The processor must undertake the process of pasteurisation, as a minimum, for pasteurised garden organics supplied under this order.
- 5.2. On or before supplying pasteurised garden organics, the processor must ensure that the pasteurised garden organics:
 - 5.2.1. do not contain asbestos, engineered wood products and preservative treated or coated wood residues.
 - 5.2.2. are ready for land application.
- 5.3. The processor must not mechanically size-reduce the pasteurised garden organics through methods such as hammer milling, crushing or grinding as a way of managing the physical contaminant loading.

Sampling requirements

- 5.4. On or before supplying pasteurised garden organics, the processor must:
 - 5.4.1. prepare a written sampling plan which includes a description of sample preparation and storage procedures for the pasteurised garden organics.
 - 5.4.2. ensure that the absolute maximum or other value of that attribute in the pasteurised garden organics does not exceed the absolute maximum listed in Column 2 of Table 1.

Table 1

Column 1	Column 2
Attributes	Absolute maximum (% 'dry weight')
1. Glass, metal and rigid plastics > 2 mm	0.5
2. Plastics – light, flexible or film > 5 mm	0.05

Test methods

- 5.5. The processor must ensure that any testing of samples required by this order is undertaken by analytical laboratories accredited by the National Association of Testing Authorities (NATA), or equivalent.
- 5.6. The processor must ensure that the attributes listed in Column 1 of Table 1 in the pasteurised garden organics supplied are tested in accordance with the test methods specified below or other equivalent analytical methods. Where an equivalent analytical method is used the detection limit must be equal to or less than that nominated for the given method below.
 - 5.6.1. Test method for measuring physical contaminants 1 and 2:
 - 5.6.1.1. Australian Standard AS4454-2012 Composts, soil conditioners and mulches, "Appendix I - Method For Determination Of Moisture Content And Level Of Visible Contamination". This test must be conducted under bright and direct light.
 - 5.6.1.2. Results must be reported as % contamination on a dry mass basis.

Record keeping and reporting

- 5.7. The processor must keep a written record of the following for a period of six years:
- the sampling plan required to be prepared under clause 5.4.1;
 - all test results in relation to any pasteurised garden organics supplied;
 - documentation of the pasteurisation process; and
 - the quantity of any pasteurised garden organics supplied.
- 5.8. The processor must provide, on request, the most recent test results for pasteurised garden organics supplied to any consumer of the pasteurised garden organics.
- 5.9. The processor must notify the EPA within seven days of becoming aware that it has not complied with any requirement in clause 5.1 to 5.6.

6. Definitions

In this order:

application or apply to land means applying to land by:

- spraying, spreading or depositing on the land;
- 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, pasteurised garden organics to land.

engineered wood products means engineered, painted, treated or composite wood products such as particleboard, oriented strand board, plywood, laminated veneer lumber, glulam or fibreboard that are manufactured with glues, resins, water repellents, fire retardants, fungal inhibitors and/or other chemicals.

forestry and sawmill residues are untreated and uncontaminated plant materials from forestry operations such as logging, silviculture and sawmilling. Forestry and sawmill residues include materials such as bark, woodchip, sawdust and wood fibre that are collected as a source separated material stream for processing.

garden organics means plant material that by virtue of the nature and source of the material poses a risk of the presence of physical and chemical contaminants. Garden organics includes material from kerbside waste collections. Garden organics must not contain asbestos, engineered wood products or preservative treated or coated wood residues.

mulch means plant material shredded and/or screened to a preferred particle size grading for particular applications. Mulch, by virtue of the nature and source of the plant material, must pose minimal risk of the presence of physical and chemical contaminants. Mulch may include urban wood residues and forestry and sawmill residues. Mulch does not include plant material from kerbside waste collections. Mulch must not contain asbestos, engineered wood products, preservative treated or coated wood residues, or physical contaminants, including but not limited to glass, metal, rigid plastics, flexible plastics, or polystyrene.

pasteurisation means a process to significantly reduce the numbers of plant and animal pathogens and plant propagules. Pasteurisation requires that the entire mass of organic material be subjected to either of the following:

- (a) Appropriate turning of outer material to the inside of the windrow so that the whole mass is subjected to a minimum of 3 turns with the internal temperature reaching a minimum of 55°C for 3 consecutive days before each turn. Where materials with a higher risk of containing pathogens are present, including but not limited to manure and food waste, the core temperature of the material mass should be maintained at 55°C or higher for 15 days or longer, and during this period the windrow should be turned a minimum of 5 times.
- (b) An alternative process of pasteurisation that guarantees the same level of pathogen reduction, and the reduction of plant propagules as in (a). Any such alternative process must be clearly defined in writing and validated by a suitably qualified person before claiming compliance with this order. A written record of the validation report must be kept for a minimum period of six years.

preservative treated or coated wood residues means wood residues that are preservative treated with chemicals such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP) and/or coated with substances such as varnish or paint.

processor means a person who processes, mixes, blends, or otherwise incorporates pasteurised garden organics into a material in its final form for supply to a consumer.

urban wood residues means untreated, unpainted, and uncontaminated urban derived timber and wood material that is collected as a separate material stream for processing. Urban wood residues include materials such as off-cuts, saw dust, wood shavings, packaging crates and pallets.

**Manager Waste Strategy and Innovation
Environment Protection Authority
(by delegation)**

Notes

The EPA may amend or revoke this order at any time. It is the responsibility of each processor to ensure it complies with all relevant requirements of the most current order. The current version of this order will be available on www.epa.nsw.gov.au

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

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

Any person or entity which supplies pasteurised garden organics should assess whether the material is fit for the purpose the material is proposed to be used for, and whether this use may cause harm. The supplier may need to seek expert scientific or technical advice.

Regardless of any exemption or order 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 supply of pasteurised garden organics remains subject to other relevant environmental regulations in the POEO Act and 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 this order, is guilty of an offence and subject to prosecution.

This order does not alter the requirements of any other relevant legislation that must be met in supplying this material, including for example, the need to prepare a Safety Data Sheet (SDS).

The EPA considers pasteurisation the minimum treatment to significantly reduce the numbers of plant and animal pathogens and plant propagules. However the EPA recommends full composting of mulch and/or garden organics to achieve maximum biological transformation.

Whilst this order requires that pasteurised garden organics must not contain engineered wood products, the EPA recognises that the pasteurised garden organics may contain extremely low and incidental amounts of engineered wood products. The processor must implement procedures to prevent the presence of engineered wood products in the pasteurised garden organics. These procedures must be formally documented and their implementation apparent. However, as noted in this order pasteurised garden organics must not contain any asbestos, or preservative treated or coated wood residues.

Failure to comply with the conditions of this order constitutes an offence under clause 93 of the Waste Regulation.