



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

The Direct BioMulch order May 2018

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 processors to which 'The Direct BioMulch exemption May 2018' and 'The Direct BioMulch - PGH bricks exemption 2018' apply. The requirements in this order apply in relation to the supply of Direct BioBedding for use as a soil amendment and as an alternate raw material in the manufacture of bricks at PGH Bricks and Pavers, Cecil Park NSW 2178, Environment Protection Licence (EPL) 1027.

1. Waste to which this order applies

1.1. This order applies to Direct BioMulch. In this order, **Direct BioMulch** means shredded urban wood residues from the processing of pallets and framing material at Direct Corp Ply Ltd processing facility at 38 Williamson Road Ingleburn NSW 2565. Direct BioMulch may contain a maximum combined total of 5% (w/w):

- engineered wood products where only urea formaldehyde, melamine formaldehyde, and melamine urea formaldehyde resins are present; and
- blue pine which has been surface treated with permethrin or bifenthrin.

Direct BioMulch does not include source separated garden waste and must not contain asbestos, engineered wood products or preservative treated or coated wood residues other than those described in this definition.

2. Persons to whom this order applies

2.1. The requirements in this order apply, as relevant, to any person who supplies Direct BioMulch that has been generated, processed or recovered by the person.

2.2. This order does not apply to the supply of Direct BioMulch to a consumer 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)', clause 40 'waste disposal (thermal treatment)', or clause 18 'energy recovery' of Schedule 1 of the POEO Act.

3. Duration

3.1. This order commences on 22 May 2018 and is valid until 22 May 2020. unless revoked by the EPA by notice in writing at an earlier date.

4. Revocation

- 4.1. 'The Direct Pallets mulch order 2016' which commenced on 15 April 2016 is revoked from 22 May 2018.

5. Processor requirements

The EPA imposes the following requirements on any person who processes and supplies Direct BioMulch. The processor in this order is Direct Pallets located at 3B Williamson Road, Ingleburn NSW 2565, EPL 20637.

General requirements

- 5.1. On or before supplying Direct BioMulch, the processor must ensure that:
 - 5.1.1. Direct BioMulch contains no more than a 5% (w/w) combined total of:
 - 5.1.1.1. engineered wood products where only urea formaldehyde, melamine formaldehyde, and melamine urea formaldehyde resins are present; and
 - 5.1.1.2. blue pine which has been surface treated with permethrin or bifenthrin.
 - 5.1.2. Direct BioMulch does not include source separated garden waste.
 - 5.1.3. Direct BioMulch does not contain asbestos, engineered wood products, preservative treated or coated wood residues other than those described in 5.1.1 or physical contaminants, including but not limited to glass, metal, stone, plaster, rubber, paper, cloth, rigid plastics, flexible plastics, or polystyrene.
 - 5.1.4. Direct BioMulch is ready for land application and for use as an alternative raw material in the manufacture of bricks.
 - 5.1.5. Direct BioMulch is processed in accordance with the document entitled *Direct Pallets BioBedding®/BioMulch® Quality Control Plan – Version 3 – May 2018 (QCP)* at Attachment 1.

Quality control requirements

- 5.2. Before supplying Direct BioMulch, the processor must submit to the EPA a drawing which shows three designated drop-off areas, a designated bay and residual waste area, that must be employed to minimise cross contamination of the various waste materials.
- 5.3. Direct BioMulch should not be stored on site for long periods of time in its final, processed form. Direct BioMulch should be transported off-site within a reasonable period of time, and as soon as reasonably practicable.

Sampling requirements

- 5.4. The processor must collect at least one composite sample every calendar month that Direct BioMulch is produced. This must be done in accordance with the approved Sampling Plan (Appendix 4 of the QCP). Each composite sample must be taken from a batch, truckload or stockpile that has not been previously sampled for the purposes of monthly sampling.
- 5.5. Each sample must be tested for the chemicals and other attributes listed in Column 1 of Table 1.

Chemical and other material requirements

- 5.6. The processor must not supply Direct BioMulch to any person if the threshold of any attribute of any sample collected and tested as part of the monthly sampling of the Direct BioMulch exceeds the absolute maximum value listed in Column 2 of Table 1.
- 5.7. The absolute maximum concentration or other value of that attribute in any Direct BioMulch supplied under this order must not exceed the absolute maximum concentration or other value listed in Column 2 of Table 1.

Table 1

Column 1	Column 2
Chemicals and other attributes	Absolute maximum concentration
1. Mercury	NL
2. Selenium	NL
3. Cadmium	NL
4. Copper	NL
5. Arsenic	NL
6. Nickel	NL
7. Lead	NL
8. Antimony	NL
9. Vanadium	NL
10. Tin	NL
11. Beryllium	NL
12. Chromium	NL
13. Manganese	NL
14. Total Kjeldahl Nitrogen (TKN)	NL
15. Engineered wood products and blue pine (%w/w)	<5%

* NL – Not limiting.

Test methods

- 5.8. The processor must ensure that testing of samples for chemicals 1-14 required by this order is undertaken by analytical laboratories accredited by the National Association of Testing Authorities (NATA), or equivalent.
- 5.9. The processor must ensure that the chemicals and other attributes (listed in Column 1 of Table 1) in the Direct BioMulch it supplies 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.

- 5.9.1. Test method for measuring the mercury concentration:
- 5.9.1.1. Analysis using USEPA SW-846 Method 7471B Mercury in solid or semisolid waste (manual cold vapour technique), or an equivalent analytical method.
 - 5.9.1.2. Report as mg/kg dry weight.
- 5.9.2. Test methods for measuring chemicals 2 - 13:
- 5.9.2.1. Sample preparation by digesting using USEPA SW-846 Method 3051A Microwave assisted acid digestion of sediments, sludges, soils, and oils.
 - 5.9.2.2. Analysis using USEPA SW-846 Method 6010C Inductively coupled plasma - atomic emission spectrometry, or an equivalent analytical method.
 - 5.9.2.3. Report as mg/kg dry weight.
- 5.9.3. Test method for measuring TKN:
- 5.9.3.1. Analysis using method 7A1 or 7A2, total nitrogen – semi micro Kjeldahl. Soil Chemical Methods – Australasia, Rayment, G.E. and Lyons, D.J. 2011.
 - 5.9.3.2. Report nitrogen in mg/kg dry weight.
- 5.9.4. Test method for measuring engineered wood products and blue pine:
- 5.9.4.1. QCP “Appendix 5 – Levels of engineered wood products and blue pine: test method”.
 - 5.9.4.2. Report as % w/w.

Notification

- 5.10. On or before the transaction, the processor must provide the following to each person to whom Direct BioMulch is supplied:
- a written statement of compliance certifying that all the requirements set out in this order have been met;
 - a copy of ‘The Direct BioMulch order May 2018’; and
 - as relevant, either:
 - a copy of ‘The Direct BioMulch exemption May 2018’; or
 - a copy of ‘The Direct BioMulch - PGH Bricks exemption 2018’.

Record keeping and reporting

- 5.11. The processor must keep a written record of the following for a period of six years:
- the QCP required to be implemented under clause 5.1.5 of this order;
 - all monthly sampling results in relation to the Direct BioMulch supplied;
 - the quantity of Direct BioMulch supplied;
 - delivery dockets signed by a Direct Pallets staff member and a purchaser representative as outlined in the QCP; and
 - the name and address of each person to whom Direct BioMulch was supplied under this order.
- 5.12. The processor must provide, on request, the most recent monthly sampling results for Direct BioMulch supplied to any consumer of Direct BioMulch.
- 5.13. The processor must notify the EPA within seven days of becoming aware that it has not complied with any requirement in condition 5.1 to 5.9.

6. Definitions

In this order:

bluepine means timber that is treated with synthetic pyrethroids or neonicotinoids.

consumer means a person who uses, or intends to use Direct BioMulch. Allowable uses include land application, or thermal treatment by PGH Bricks and Pavers, Cecil Park, NSW 2178 (EPL 1027).

composite sample means a sample that combines five discrete sub-samples of equal size into a single sample for the purpose of analysis.

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

processor means a person who processes and supplies Direct BioMulch to a consumer. The processor in this order is Direct Pallets located at 3B Williamson Road, Ingleburn NSW 2565 (EPL 20637).

transaction means the first supply of Direct BioMulch as required under the arrangement, where the recipient has an arrangement for more than one supply of Direct BioMulch.

treated pallets means pallets treated with any chemical including fumigation with methyl bromide. It does not include heat treated pallets.

treated timber means wood treated with water, solvent and/or oil-borne preservatives. This includes but is not limited to copper chromium arsenic (CCA), light organic solvent preservative (LOSP), creosote and envelope treatments for preservation, insecticides and fungal treatments.

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.



21.05.18

**Manager Waste Strategy and Innovation
Environment Protection Authority**

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.

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 Direct BioMulch 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 processor may need to seek expert engineering or technical advice.

Regardless of any exemption or order provided by the EPA, the person who causes or permits the thermal treatment or land application of the substance 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 Direct BioMulch 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. Failure to comply with the conditions of this order constitutes an offence under clause 93 of the Waste Regulation.