

Green Waste Composting

Organic requirements are in addition to other statutory requirements
 Statutory information is for guidance only and is correct at time of going to print

Local councils are now encouraging farmers to compost green waste from municipal collection schemes, in a bid to reduce landfill, which wastes resources and produces greenhouse gases. OF&G supports efforts to recycle and improve sustainability

This Technical Leaflet gives brief details about green waste composting and how to ensure the enterprise complies with statutory and organic regulations.

Green waste is made up of tree branches, hedge clippings, shrubs, grass cuttings, plants, leaves, turf etc. It is delivered to farms and the farmer is paid a gate fee (currently £15-£25 per tonne) for accepting and processing the material.

The incoming material (feedstock) is inspected and any contaminants (eg plastic) are removed. The feedstock is normally then shredded and mixed, to aid decomposition, then formed into windrows (elongated triangular piles).

Within a few days of composting, bacteria start to break down the biodegradable material and generate significant heat and the windrows need to be turned regularly to aerate and homogenise the material. Normally, after 8-14 weeks, (depending on weather, process, feedstock etc), the microbial activity and the temperature decrease. Then, over the next few months, other naturally occurring processes take place to produce a stable compost, ready for use or sale.

Approval:

1. You need a Waste Management Licence Exemption from the Environment Agency and Planning Permission from your Local Authority before setting up a green waste composting operation. (See details below)
2. You need to get approval from OF&G before setting up a composting site on your registered land
3. You need a Derogation from OF&G before using composting materials from outside your farm. In order to do this, please complete and submit a copy of Record Sheet 9 (from Section 6 of the Control Manual).
4. If you plan to sell some of the green waste compost, you need to inform OF&G and comply with the organic processing and labelling regulations. You may also need to apply for a full Waste Management Licence.

Licensing: Most UK farm sites operate under a Waste Management Licence Exemption. This is obtained from the Environment Agency (UK), the Scottish Environment Protection Agency or the Department of Environment for Northern Ireland. (See contact details on page 3).

This exemption has several advantages but the drawbacks are that:-

- The site can only process a limited quantity of waste at any one time. The maximum allowed is currently 1000 cubic metres (approx. 500 tonnes) but this quantity is likely to be reduced;
- The compost cannot be sold off-site, it must be used on the farmer's own land;

For full details of licensing & exemptions see The Waste Management Licensing Regulations 1994 (see detail on page 3) Statutory Instrument 1994 No. 1056 (as amended). ISBN 0-11-044056-0 (www.hms.gov.uk/si/si1994/Uksi_19941056_en_1.htm)

Planning Permission: This is required from your County Council or Unitary Authority regardless of the size or intended use of the compost.

A suitable farm site needs to be located reasonably near the place where the waste is produced, have good access from public highways, be at least 250 metres away from any dwelling or place of work (excluding the composting operation/farm) and have a suitable area on which to store, manoeuvre and process the waste material. A rule of thumb is that 1 square metre is required for each tonne of waste material processed per year, so 50 tonnes per year requires 50 square metres.

The site must not produce pollution to land, water or air. The composting material must be produced to an appropriate standard and have an environmentally-friendly end use. Showing that the process is cost-effective and/or has significant environmental benefits, will aid the planning application.

Before applying for planning permission, it is advisable to :-

- Discuss your plans with your County Council or Unitary Authority;
- Examine the local development plan;
- Liaise with the local community and parish/town councils;
- Analyse all aspects of your proposed composting facility especially
 - Transport, traffic and access
 - Surface and groundwater (leachate control)
 - Visual intrusion
 - Odour control
 - Noise control

It may be a good idea to employ a specialist consultant to assist with a planning application.

Specialist machinery / equipment: Much of the work can be done using existing farm equipment but a shredder may be required. A weighbridge, screener and windrow turner may also be required for larger operations.

A constant supply of uncontaminated green waste: Most green waste is from local authority recycling centres or kerbside collection schemes, which are generally well controlled, with low levels of contamination. Green waste may also be accepted from landscape gardeners and other private companies but careful monitoring must be done. (Note: Kitchen waste is not acceptable as green waste.)

Usage Rates: For farmers working under an Exemption, all compost must be used on their own land. Safe application rates are 20-40 tonnes/hectare for arable land or 10-15 t/ha for grassland. (1 tonne of green waste produces approx. $\frac{1}{2}$ tonne of compost.)

Farmers who plan to sell the compost and apply for a full Waste Management licence, need to do market research to ensure they have a market for the quantities they plan to produce, before processing begins.

Use of compost: A typical green waste compost contains only 1% total nitrogen and only a small percentage of this may be available to a crop in a single season, however it is useful as a mulch and can contribute to improved soil structure and aeration (partly by attracting earthworms) and to replace soil lost by erosion.

Compost may be able to reduce nitrate losses from soil leaching and a high compost application rate is known to suppress a wide range of soil-borne crop diseases.

Useful Websites

The On-Farm Composting Network

www.farmcompost.com

The Composting Association

www.compost.org.uk

Community Composting Network

www.othas.org.uk/ccn/index.html

Department for Environment, Food and Rural Affairs (DEFRA)

www.defra.gov.uk

The Environment Agency

www.environment-agency.gov.uk

National Waste Awareness Initiative

www.nwai.org.uk

Remade – Waste information for Scotland

www.remade.org.uk

Scottish Environment Protection Agency (SEPA)

www.sepa.org.uk

Waste Watch

www.wastewatch.org.uk

Waste and Resources Action Programme

www.wrap.org.uk