



EU FERTILISING PRODUCTS REGULATION OPENS  
THE WAY FOR EUROPEAN TRADE IN COMPOST

# Europe sets unworkable sanitisation requirements



Compost products will soon be allowed to cross Europe's internal borders. The composting sector applauds the award of the much coveted product status to compost, but is concerned about the implications of the revised Fertilising Products Regulation. On the one hand, the composting process must meet a set of unworkably strict sanitisation standards – with severe consequences for the composters. On the other hand, certain organic wastes will be allowed onto the European market *without* sanitisation – with all the risks this entails.



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Author: Harry Perrée 

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ARJEN BRINKMANN  
(BVOR)

**A** new EU Fertilising Products Regulation will soon come into force, but this time as part of the Circular Economy Package. It upgrades the status of compost and digestate – fertilisers made from organic residual waste. These have been included as a new category in the regulation and will have free access to the internal market. Compost crossing an internal border will no longer be registered as a waste, but as a product bearing the CE mark, which signifies that the product meets all the European safety, health and environmental protection requirements. The composting sector is delighted with this new product status. It was longstanding desire. The sector looks forward to new export opportunities and expects a boost to the recycling of organic residual wastes in Europe.

### Support for underlying aim

*Arjen Brinkmann*, director of the Association of Dutch Greenwaste Composting Plants (BVOR), endorses the underlying aim of the review of the fertiliser legislation. ‘The European Commission wants to facilitate the recycling and reuse of residual wastes as fertilisers. This is positive and in line with what we are already doing in the Netherlands.’ *Henrik Lystad*, chairman of the European Compost Network (ECN), points out that many EU member states currently have no regulations at all governing the production and use of compost. He expects these countries will incorporate the EU Fertilising Products Regulation as it stands into their own law. ‘This EU regulation gives a clear signal on how compost should be made. That is a positive effect of this law.’



### Serious concerns

However, the composting sector is seriously concerned about the wider impacts of the current proposal. It makes product status conditional upon a number of process requirements which the sector considers to be disproportional. 'The regulation imposes unsubstantiated and disproportionately strict process requirements on composting facilities,' says Brinkmann, referring in particular to the proposed sanitisation requirements.

### Sanitisation requirements

The revised regulation imposes new sanitisation requirements on fertilising products, including compost. The aim of these requirements is to ensure weed seeds and pathogens such as bacteria, viruses and other microorganisms are eliminated.

### Keurcompost and/or CE compost?

The revised EU fertilising products legislation opens Europe's internal market to compost with the CE mark. However, the Netherlands already has a quality label for compost – Keurcompost – an initiative by the DWMA and the BVOR. Keurcompost demands stricter quality standards for contaminants than the proposed Fertilising Products Regulation. The Dutch composters have agreed with the arable farming sector that they will ensure the 'foreign bodies' fraction (materials that do not belong in soil, such as plastic and glass) is kept to the minimum.

BVOR director Arjen Brinkmann is concerned about the potential for confusion by having two approval marks. 'What we don't want to have is compost imported from other countries – bearing the CE mark which indicates a quality product – with a much higher plastic and class content than Dutch Keurcompost, which has a tenth of the contamination but no CE label. That will only cause confusion in the market. Customers won't know which is the better quality product.'

**The composting sector  
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sanitisation requirements.**



# Compost products will have free access to Europe's internal market.

For the sanitisation phase of the composting process the proposed new regulation prescribes time-temperature profiles, which are combinations of composting durations and temperatures. The current proposal contains four options: 14 days at 55°C; 7 days at 60°C; 5 days at 65°C; and 1 day at 70°C.

## Financial consequences

Dutch composters use time-temperature profiles that are appropriate to their specific installations and produce good quality compost. 'Soon all composting companies will have to choose from one of the proposed profiles, which means Dutch composters will have to meet much stricter process requirements and the material will have to be treated in a totally different way,' explains Brinkmann. If these requirements are adopted and made law, the financial consequences for the Dutch composting sector will be severe. 'Not only composting companies, but also discarders of organic waste will be faced with

higher costs, despite the fact that no evidence has been given that these stricter requirements will deliver a higher quality product or ensure higher levels of safety.'

## No emergencies

The Netherlands takes a flexible regulatory approach. 'The time-temperature profile varies from one installation to another. This Dutch approach takes account of the actual situation on the ground and the diversity of different facilities,' says Brinkmann. The Dutch approach works. Dutch composters regularly take and analyse samples and the results show that the compost is free of pathogens. Emergencies caused by pathogens have never arisen. 'There have never been any problems with Dutch compost.'

## Unsubstantiated

Plant pathologist *Aad Termorshuizen* has reviewed the proposed EU fertilising products legislation for the DWMA and found that the

proposed time-temperature profiles are unsubstantiated. He says the proposal refers to Annex 20 of a [report on end-of-waste criteria](#) by the Joint Research Centre, which advises the European Commission. 'This report contains a review of the sanitisation requirements for eliminating pathogens in each of the member states, but contains no evidence to substantiate these requirements.'



At the moment many EU member states have no regulations on compost production and use at all.



HENRIK LYSTAD (ECN)





### No clear causal relationship

According to Termorshuizen, stricter sanitisation requirements – a higher temperature and/or longer composting duration – do not always

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provide better protection against pathogens and weeds. ‘Much of the scientific literature on this is based on studies of clubroot, a disease of cabbages, and on the tobacco mosaic virus. You would think that higher temperatures and longer composting periods would reduce the survival rate of these pathogens, but I found no evidence of this.’ According to the plant pathologist, some studies found a correlation between a high time–temperature profile and pathogen elimination, while others did not. ‘There is therefore no clear causal relationship.’

### Other factors

Temperature and composting duration are not the only factors involved in eliminating pathogens. Termorshuizen found no less than six other factors that determine

whether or not pathogens and weed seeds are killed. One of these is moisture content. ‘By optimising the moisture content you can probably get away with a milder time–temperature profile,’ he says. Sometimes lower temperatures may even be necessary. For example, the tobacco mosaic virus can survive a temperature of 100°C, but it loses out to certain microorganisms that thrive best at temperatures of 25°C to 35°C. ‘But more research on this is needed.’

### Two amendments

The European Compost Network proposes two amendments to the revised Fertilising Products Regulation. First, ECN proposes an extra time–temperature profile for composting of 60°C or more for at least 3 days. Furthermore, ECN



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suggests that composters should also be permitted to adopt alternative composting processes than just those defined by the time-temperature profiles. 'On the condition that the alternatives are approved by a regulatory authority, such as the European Food & Safety Authority,' adds Lystad of ECN.

## Escape clause

Besides the time-temperature profiles, the composting sector is concerned about another problem, the exemption described by [Component Material Category 2 \(CMC2\)](#) in Annex II of the regulation. This permits the use of certain untreated organic material as fertilising products. This escape clause covers a range of materials including sawdust, tree leaves, roadside grass cuttings and processed food past its sell-by date, such as a shipment of rejected tomatoes. Composting is subject to unworkable sanitisation requirements, but at the same

time the regulation proposes that such wastes be exempt from any sanitisation requirements at all. These materials may be applied to the land or sold as soil conditioners without having undergone any sanitisation, with all the concomitant risks of spreading weed seeds, pathogens and invasive exotics.

## Japanese knotweed

The composting sector argues that *all* organic wastes should be subject to a proven sanitisation process. 'We are worried,' says Lystad, 'that otherwise weed seeds and undesirable plants will be able to spread unchecked.' As an example he mentions the Japanese knotweed, an extremely vigorous invasive exotic. 'Japanese knotweed may be present in clippings and cuttings. If this plant material is not put through a composting process it will not be killed. Applying uncomposted clippings to the soil would allow this plant to become established and spread uncontrollably.

## Amend the exemption

Termorshuizen expects that this escape clause will not get past Parliament and the Council. 'The European institutions will re-examine the CMC2 escape clause for organic waste. But even if the proposal is adopted as it stands, it will still be possible to amend the list of exemptions at a later date. Composting is not necessary in only a very limited number of cases, such as sawdust from certain species of tree.' Don't forget, says Termorshuizen, that the whole reason for composting in the first place was to kill pathogens and weed seeds.

### More information:

- [Fertilising Products Regulation](#)
- [Component Material Category 2](#)
- [Review Plant Pathologist](#)

