



OXO-BIODEGRADABLE PLASTICS ASSOCIATION

A not-for-profit Association

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US FEDERAL TRADE COMMISSION WARNS ON “COMPOSTABLE” PLASTIC

In October 2012 the US Federal Trade Commission issued a revised version¹ of its “Green Guide” which warns against making deceptive environmental claims. The FTC has power to prosecute in such cases. The FTC says at 260.7(a) that “It is deceptive to misrepresent, directly or by implication, that a product or package is compostable.”

The FTC had two concerns – explained in their “Statement of Basis and Purpose”² - the first related to the very limited availability in the US of industrial composting facilities where plastics would be accepted, and the second related to the performance of “compostable” plastics in home and industrial composting.

They noted³ that in a survey commissioned by the American Chemistry Council 62% of respondents said that they did not have access to large-scale composting facilities, and a further 28% did not know whether they had access to such facilities. What therefore is the point of “compostable” plastic if the facilities for processing it are not locally available?

Accordingly in para. 260.7 (d) the FTC warns that “to avoid deception about the limited availability of municipal or institutional composting facilities a marketer should clearly and prominently qualify compostable claims if such facilities are not available to a substantial majority of consumers or communities where the item is sold.”

Most of these plastics cannot be processed in home-composting. Also home-composting is not controlled, and temperatures are unlikely to be high enough to kill the pathogens adhering to plastic which has been used for food-packaging. Para. 260.7(c) (1) of the Guide therefore provides that marketers should clearly and prominently qualify compostable claims to the extent necessary to avoid deception if the item cannot be composted safely or in a timely manner in a home compost pile or device.

These bio-based plastics are often marketed as “renewable”, but the FTC said (260.16) that “It is deceptive to misrepresent, directly or by implication, that a product or package is made with renewable materials.” The FTC takes the view that “reasonable consumers may interpret renewable materials claims differently than marketers may intend, and that “unless marketers have substantiation for all their express and reasonably implied claims, they should clearly and prominently qualify their renewable materials claims.”

One of the main reasons why people are attracted to bio-based plastics is that they think that they are renewable. In fact substantial amounts of non-renewable resources (fossil fuels) are used in the agricultural production process and the polymerisation process⁴ of bio-based plastics. In addition land and water resources are used for growing the raw material for bio-based plastics, which ought to be used for growing food in a world where there is so much hunger.

Consumers will be misled by a “renewable” claim unless they are so advised.

¹ <http://www.ftc.gov/os/fedreg/2012/10/greenguidesstatement.pdf>

² pp 113-115

³ p 113

⁴ See “Bio-based plastics are not really renewable”

<http://www.biodeg.org/files/uploaded/Hydro-biodegradable%20Plastic%20Production%20Process.pdf>

By contrast, oxo-biodegradable and conventional plastics are made from a by-product of oil which used to be wasted. Oil and gas are extracted to make fuels, and the use of the by-product to make plastics is not causing any depletion of the world's petroleum resources.

As to the performance of the product, the FTC said that a “compostable” claim should be substantiated by competent and reliable scientific evidence that the entire item would break down into or otherwise become part of usable compost in a safe and timely manner in an appropriate composting facility or a home composting pile.

The FTC added that it was not sufficient to show that a test item had complied with ASTM D6400 or D6868, because those standards “likely do not typify compost facility operations nationwide.⁵ Rather they reflect “optimum [operating] conditions and ignore wide variation in actual facility operations. Because of these variations, the ASTM protocols likely do not replicate typical compost facility environments. Therefore, consumers whose local facility [if they have one at all] operates differently than the ASTM’s assumptions would be deceived if their item were incapable of being composted.” (D6400 and D6868 do not apply to home-composting at all).

In addition, it is unlikely that a plastic marketed as complying with ASTM D6400 or D6868 (or EN13432, Australian 4736 or the ISO equivalents) would “break down into or otherwise become part of usable compost.” This is because these standards require the plastic to break down substantially into CO₂ gas within 180 days.⁶ This gas is typically released to atmosphere where it contributes to climate-change but it does not become part of usable compost.

These plastics should not therefore be described as “compostable” and marketers may risk prosecution if they are so described.

Even where industrial composting facilities are available, composters will not normally accept shopping bags, packaging, and other mixed post-consumer plastic waste because they do not wish to separate compostable from non-compostable plastics, and because the “compostable” plastics do not add any value to the compost.

Products marketed as compliant with ASTM D6400, EN13432 or their equivalents are normally designed to biodegrade in the special conditions found in industrial composting facilities, and they should not therefore be described as “biodegradable.”

With regard to landfill, Para. 260.7 (c) (2) provides “that marketers should clearly and prominently qualify compostable claims to the extent necessary to avoid deception if the claim misleads reasonable consumers about the environmental benefit provided when the item is disposed of in a landfill.” Consumers may be deceived if the marketer does not draw attention to the fact that bio-based plastics can generate methane deep in landfill and that methane is a dangerous greenhouse gas.

In conclusion – what is the point of bio-based or “compostable” plastics if they cannot be made into compost, if they should not be sent to landfill, if they cannot be recycled with ordinary plastic, if they are not really renewable, if they use scarce land and water resources, and if they are more expensive and less versatile?

⁵ p114

⁶ See eg D6400 at para. 6.3