

EU Update

We were not entirely surprised to see that a Vice-President of the EU Parliament had been arrested for corruption, and that the homes and hotels of 18 MEPs and officials had been searched by the police, who found suitcases stuffed with banknotes.

The reason we were not surprised, is that we have never been able to understand how it was possible to impose a ban on "oxo-degradable" plastic products (by Art. 5 of the Single-use plastics Directive 2019/904) without any dossier from the European Chemicals Agency (ECHA) showing any justification for such a ban. To make matters worse, the Commission had asked ECHA (under Art 69 of the REACH Regulation) to study whether these products created microplastics. ECHA received hundreds of pages of evidence but were then instructed to terminate the study.

The Parliament and Council then proceeded to legislate, and ignored all the safeguards against arbitrary legislation provided by Arts. 69-73 of REACH. In October 2018 we received an e-mail from the leader of the scientific team at ECHA saying that they had not been convinced that microplastics were formed.

Could it be that there was some corrupt influence behind the scenes? Surely not, but we think the Belgian police should investigate. They could start by reading the article by the editor of Bioplastics News on the campaign against oxobiodegradable plastic by large German and Italian bio-based plastics companies. See https://bioplasticsnews.com/2021/12/06/history-anti-oxo-biodegradable-plastics-history/

According to The Sunday Times (18.12.22) "In Roberta Metsola's attempt to blame a few bad apples, critics see a failure to address a fundamental problem: the extent to which the parliament, which wields real legislative power, is open to manipulation by lobbyists."

It should be noted that due to Brexit, the UK need not implement any provisions of the Directive unless it wishes to do so.

The loser here is Europe's environment, because ordinary plastic is still being used to make products which get into the open environment every day, where they will lie or float around for decades. They should be made with d₂w oxo-biodegradable plastic, which will biodegrade much more quickly and will not leave harmful residues.

CONFUSION

This ridiculous, and possibly corrupt, ban needs to be urgently dealt with by the Commission making it clear that it does not apply to oxo-biodegradable (as distinct from oxo-degradable) plastic.

CEN-the European Committee for Standardisation have established the following definitions in TR15351:

- 1 Oxo-degradation is 'degradation resulting from oxidative cleavage of macromolecules.'
- 2 Oxo-biodegradation is 'degradation resulting from oxidative and cell-mediated phenomena, either simultaneously or successively.'

As reported in Symphony's half-year results on 14 September 2020 the Directive causes confusion in the marketplace as it requires EU members to ban oxodegradable products that do not properly biodegrade and are not recyclable with ordinary plastics. We have explained the difference between oxodegradable and oxo-BlOdegradable plastic, but the Directive has not made this clear. Symphony's d₂w plastic is oxo-BlOdegradable not oxo-degradable. It does properly biodegrade and it is recyclable with ordinary plastic. See https://www.biodeg.org/subjects-of-interest/recycling-2/

It is clear that d_2w technology would achieve considerably better traction both within the EU and outside Europe if this confusion could be resolved.

Symphony's d₂w technology causes ordinary plastic to degrade if it gets into the open environment and then to biodegrade in the same way as nature's wastes. It has been validated for degradability, biodegradability, non-toxicity, and recyclability by 40 years of research, most recently by scientists at Queen Mary University, London https://www.biodeg.org/www.biodeg.org/queen-mary-university-london-report/ and at LOMIC (Laboratory of Microbial Oceanography) in France, https://www.biodeg.org/wp-content/uploads/2021/07/Final-report-OXOMAR-10032021.pdf

The main purpose of the Directive is to ban single-use plastics most often found on the beaches, but there is no evidence that any oxo-biodegradable plastics have been found on the beaches or anywhere else. This is not surprising, because it biodegrades rapidly on exposure to the open environment, leaving no harmful residues.

The EU fails to acknowledge that the billions of persistent fragments and microplastics in the open environment, including the oceans, are actually coming from the fragmentation of ordinary and bio-based plastics which have not been upgraded with oxo-BlOdegradable technology.

Oxo-biodegradable plastic products (polyethylene and polypropylene), incorporate a catalyst and stabilisers to ensure that the product will be serviceable for its intended life and can be re-used and recycled, but if it escapes into the open environment a fast oxidative (abiotic) cleavage of its macromolecules will occur, so that it will become biodegradable by cell-mediated phenomena (bacteria and fungi) in the environment much more quickly than ordinary plastic. Heat and UV radiation (sunlight) will accelerate the abiotic process, but they are not essential.

THE COURT CASE

Symphony is advised that the Art. 5 ban is illegal because there has been a failure to accord due process, and because it is disproportionate and discriminatory.

The EU has a well-established procedure, set out in the REACH Regulation 2006/1907, for determining whether substances should be banned. This procedure was designed to avoid the kind of arbitrary action which has occurred in this case.

In December 2017, in compliance with the procedure, the EU Commission requested the European Chemicals Agency ("ECHA") under Article 69 of REACH to investigate its concerns regarding microplastics. Symphony submitted scientific evidence to ECHA on oxo-BIOdegradable plastic and ECHA also received a report from Intertek.

The Commission then made the extraordinary decision on 8 May 2019 to terminate ECHA's investigation, and the EU proceeded to impose a ban effective from 3 July 2021, citing microplastics as a reason. In doing so, they ignored their own scientific experts who had submitted no dossier for a restriction and, on 30th October 2018, had actually informed the Biodegradable Plastics Association that they were not convinced that it created microplastics. Never before has an ECHA investigation been circumvented.

Only if ECHA had recommended a restriction, supported by the detailed dossier prescribed by Annex XV of REACH, the recommendation would have had to be considered by two committees under Articles 70 and 71 of REACH, and also by a stakeholder consultation under Article 71(1), before any restriction could be proposed under Article 73. None of these procedures prescribed by EU law have been complied with.

Therefore, on 21st December 2021 Symphony Environmental Technologies Plc commenced a legal action against the Commission, Parliament, and Council of the European Union ("EU") in relation to their decision to adopt Article 5 of the Single Use Plastics Directive 2019/904. Symphony had been advised by three Barristers, all experts in EU law, that this part of the Directive is confusing and illegal, and substantial damages are being claimed.

The written proceedings are now closed. All parties received some written questions from the court in December 2022, and are awaiting a date for a hearing in Luxembourg.

Symphony's Board has not taken this action lightly, but the way the EU has behaved and the resultant confusion and damage to its business is unacceptable. Restraint of trade is not acceptable without due process, non-discrimination, proportionality, and scientific justification.

ANTIMICROBIAL TECHNOLOGY

It is important to note that Symphony's d2p business <u>www.d2p.net</u> is not affected by the Directive. d₂p is a wide range of products, which include technologies that give plastic, rubber, and silicon anti-bacterial and anti-viral properties, and is an increasingly important part of Symphony's overall business.

These are among the few materials commonly used which can themselves (as distinct from painting and spraying) be made to destroy viruses on contact – before they can enter the human body. The demand for antiviral and anti-insect plastic is growing at a rapid rate all around the world, and making it biodegradable with d₂w will help to protect the environment as well.

21st December 2022