

April 1st, 2015

STATEMENT

Re: "Biodegradable Plastics Additives "Don't Work", Claims MSU Study" Published in Waste Management World, March 27, 2015

A study by Michigan State University's (MSU) on the 'Evaluation of Biodegradation-Promoting Additives for Plastics' by researchers at the Schools of Packaging and Biosystem and Agricultural Engineering was found to contain a number of methodological flaws and scientific inconsistencies.

In particular, we have noted three fundamental methodological flaws in this study:

1. Anaerobic Landfill

Using ASTM 5526-12 to simulate anaerobic landfill condition has no relevance to oxobiodegradable plastics which are designed to degrade in the upper regions of landfills where oxygen is present. The use of anaerobic condition merely confirms the inertness of oxobiodegradable plastics in this environment which avoid the generation of methane, a particularly harmful greenhouse gas if not recovered for its energy value.

2. Industrial Composting

Oxo-biodegradable plastics are not designed to oxidize and then mineralize rapidly in the 6 months timescale of an industrial composting test. Composting standards such as ASTM D6400 and EN13432 are therefore irrelevant for oxo-biodegradable plastics which are designed to have a useful product life before it degrades in the open environment and become biodegradable.

3. Soil burial:

Since the oxo-biodegradable plastics in testing did not undergo aerobic degradation to create the chemical changes in the material that will lead to biodegradation, it is therefore no surprise that it did not biodegrade in soil burial.

The use of irrelevant test methodologies and protocols by the team at MSU in this study raises substantial doubt on their knowledge and understanding of oxo-biodegradable plastics. As a result, we dismissed their unfounded test results and findings.

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