



Plastics Environmental Council

Plastics Environmental Council to Develop Biodegradation Standard for Plastics Additives and New Certification Seal

Biodegradable Additives Play Critical Role in Helping Solve the Plastics in Landfill Issue

Milton, GA, OCTOBER 24, 2011 -- The Plastics Environmental Council (PEC) today announced the sponsorship of a research study to produce the first standard specification for the landfill biodegradation of petroleum- and natural gas-derived plastics that have been treated with additives that enhance biodegradation. The PEC is undertaking the development of the biodegradation standard specification to build confidence in the efficacy of plastics additives with regulators, consumers and businesses. Plastic additives that speed up the breakdown of plastic in landfills, without affecting their performance during use, are critically important to helping reduce the volume of plastic waste in landfills.

Despite the fact that readily consumer-separated items such as soda and milk bottles are collected and recycled at increasing rates, the majority of plastics simply cannot be recycled for a variety of reasons including contamination, collection and logistics costs, second end-use limitations, etc. According to the United States Environmental Protection Agency, 13 million tons of plastic containers and packaging ended up in landfills in 2008. The PEC's effort to develop a landfill biodegradation specification standard is intended to address this issue.

To develop the standard specification, PEC has partnered with Georgia Tech and North Carolina State University to conduct a large-scale research and development program, headed by a leading expert on landfill technology, Professor Morton Barlaz of North Carolina State. Professor Barlaz and his team will study waste degradation rates under both laboratory and field (landfill) conditions of petroleum- and natural gas-derived plastics that have been treated with PEC member companies' additives to produce the standard specification. Once developed, the standard specification will reliably project the landfill biodegradation rates for a given PEC-certified product in a given range of landfills over a given range of moisture conditions with much more certainty than is possible today.

"While we already know from various independent laboratory tests that our member companies' additives are expected to be effective at speeding up the biodegradation of petroleum and natural gas-derived plastics in landfills, this will be the first-of-its-kind study to verify biodegradation rates of plastic waste treated with such additives under both laboratory and field conditions," said Senator Robert McKnight, PEC Board chairman. "The new standard will allow us to develop a simple certification seal that will inspire confidence in these additives from businesses, consumers and regulators."

While most plastics from hydrocarbons are recyclable, they are not biodegradable without the addition of chemical additives and remain in landfills virtually forever. Chemical additives, many of which are approved for use by the Food & Drug Administration (FDA), are added to the plastic resins during the manufacturing process and do not alter the final product's performance, are undetectable by the end user, and products containing them can be processed through current recycling methods.

The PEC expects the landfill biodegradability certification seal to be available in approximately 18 months.

PEC member companies include Wincup, Ecologic, Bio-Tec Environmental, ECM Biofilms, ENSO Plastics, C-Line Products, Inc., Ecolab, and FP International.

About the Plastics Environmental Council

The PEC is a consortium of businesses, independent scientists and academics, engineers, landfill and compost operators, and environmental groups. Our goal is to assist our members in promoting the efficacy of state-of-the-market technology to facilitate the biodegradation of conventional petroleum-derived plastics in landfills and related disposal environments. For more information, please visit: <http://pec-us.org/>.

Main Office

Charles J. Lancelot, Ph.D.
13372 Providence Park Drive, Milton, GA 30009
Phone: (770) 475-8867; Cell (678) 296-6158
Fax: (770) 753-0164; charles_lancelot@msn.com

West Coast Office

Clifford Moriyama
P.O. Box 2166, Sacramento, CA 95812
Phone: (916) 685-4853; Cell (916) 215-5215
Fax: (916) 848-3626; cliff_moriyama@pec-us.org