

2-9-08

Last modified: 6-8-12

Compostable Plastic Products

Most of us will agree that the use of alternatives to conventional plastic products is preferred. However, in the shift to compostable plastics we cannot ignore how the compostable plastics affect the composting (and recycling) industry.

The following is a list of concerns that need to be addressed:

- Most of the compostable plastics in the US meet ASTM 6400 standards and may be certified by BPI.
 - "Biodegradability is determined by measuring the amount of CO2 produced over a certain time period by the biodegrading plastic. ASTM, ISO and DIN standards require 60% biodegradation within 180 days." From Worldcentric.org
 - For most compost facilities 60% in 180 days is not complete nor fast enough. Whereas there is no standard time for compost to mature, Sonoma Compost creates finished compost in 10-14 weeks depending on the feedstock. Sonoma Compost urges that the compostable plastic needs to meet the rate of decomposition met at efficient compost facilities in order to be called compostable.
- Compostable plastics look very similar to conventional plastic. Unless the industry adopts a marker that is clearly identifiable in the feedstock sorting process, compostable plastics are seen as plastic and therefore landfilled. Compostable plastic: Identify yourself!
- Many of the composters market their compost as allowed for organic agriculture.
 The National Organic Program (NOP) does not allow synthetics as a feedstock.
 As a result OMRI, TSA, PCO, WSDA Organic Program and others are not allowed to list compostable plastics as allowed.
 - A request must be made to the NOP to allow compostable plastics to be used as feedstock in compost for organic agriculture. Until then, compost facilities that have their products listed as allowed for organic agriculture cannot process compostable plastics.
- Environmental concerns have been raised, but not clearly addressed. Compostable plastics often are made with GMOs. Questions about the potential bioaccumulation of compostable plastics residues in plants has not been

adequately studied/reported. The fate of compostable plastics that does not reach the proper destination and ends up on the land or in waters is just as much a pollutant than conventional plastic. Also note that many compostable plastics are now made, fully or in part, from fossil oil rather than corn or potatoes as many consumers expect it to be.

- Nature Bottles is bottling water in compostable plastic bottles. Coca-Cola is studying the same concept. These bottles should not hit the market as compostable bottles. Any product made out of 'compostable plastic' that is not produced to increase the diversion of organics from landfills should not be called compostable but rather bio-recyclable and diverted back to the manufacturer to reprocess. Such efforts are currently underway. Biocorp is making sincere efforts to take back these products for reuse: http://biocor.org/. Recycling these products conserves the resources and reduces the carbon footprint.
- Compostable plastics are rapidly reaching the consumer and therefore entering the
 compost stream. Consumers are not aware of the concerns regarding compostable
 plastics and erroneously believe that they are purchasing an environmentally
 correct product. BPI, USCC, the compostable plastics industry and compost
 industry at large must work together to address the concerns listed above.

I look forward to constructive dialogue with all who share these concerns.

Sincerely,

Will Bakx Soil Scientist/Co-owner 707 479 8098 (cell) www.sonomacompost.com

Note: The USCC held a Compostable Plastics Symposium during their annual conference in Oakland on January 26, 2011. Here are the proceedings: http://compostingcouncil.org/compostable-plastics-symposium/

From that 5 workgroups were formed to address problems identified with compostable plastics:

- Labeling and identification
- Legislation and enforcement
- ASTM standards
- Consumer Education
- Operation Impacts (mostly focused on impacts to the certified organic market)

Some of these working groups have since combined into one joint group.