

Compostable Plastics Conundrum

In recent years, consumer demand for more eco-friendly alternatives to conventional plastic has led to a surge in the use of compostable plastics, a type of biodegradable plastic designed to break down into organic matter under specific environmental conditions. Made from both renewable sources like sugar cane and corn as well as fossil fuels, compostable plastics are used to make things like disposable utensils, straws, food scrap bin liners, takeout food containers, and cups. However, increasing awareness and emerging research suggest that compostable plastics can pose human health and environmental risks as well as challenges to waste management programs.



Producers of compostable plastic claim it is an environmentally responsible alternative to conventional plastic, but in practice, this is often not the case.

Challenges and Issues

Inconsistent guidance and messaging across jurisdictions regarding compostable plastics, as well as confusing labeling, contributes to consumer confusion about what goes where and increases contamination in both the recycling and compost streams.

In practice, even if an item makes it into a compost bin and to a commercial composting facility, these facilities do not have the conditions under which compostable plastics can fully break down. As a result, compostable plastics are routinely screened off at the facility. While compostable plastic bags and film do break down into smaller pieces, new research suggests that they risk leaving traces of microplastics in the finished compost that we use to grow food. Due to this, most composting facilities pull out all plastics – compostable and conventional – to avoid contamination. As such, compostable plastics simply take a longer road to the landfill, where, deprived of oxygen, they can release methane, a harmful greenhouse gas.



These “compostable” utensils were screened from a composting facility still fully intact, even after the commercial composting process.

Solutions

What actually happens to compostable plastics after they are disposed of is under increased scrutiny by policy makers, local governments, processors, and the public. Recent regulation is building upon existing laws to increase transparency about what is truly compostable, and to define compostability based on higher standards and clear labeling. In addition, cities in Alameda County are implementing their own local ordinances to help limit the sale and distribution of single use foodware in their communities.

Ultimately, however, the best solution is upstream – avoiding single use disposables of any kind and opting for reusables whenever possible. Remembering to bring your reusable bags, containers, and mugs can go a long way in solving the compostable plastics conundrum.



Issues with contamination from compostable plastics are proving to be an obstacle to viable commercial composting operations.

To learn more about what StopWaste is doing to prevent waste and advance a reusables infrastructure in Alameda County, visit www.StopWaste.org/ReusableFoodWare.