



DATE: November 15, 2023

TO: Waste Management Authority Board & Recycling Board/Planning Committee

FROM: Alma Freeman, Communications Manager
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SUBJECT: Compostable Plastics Conundrum

SUMMARY

Compostable plastic, a type of biodegradable plastic intended to break down in the composting process, is increasingly ubiquitous in our society, and used to make things like disposable utensils, straws, bin liners, takeout food containers, and cups. Manufacturers of compostable plastics market them as eco-friendlier alternatives to traditional plastic which is typically made from petroleum-based raw materials. However, increasing awareness and emerging research suggest that compostable plastics also present challenges to both waste management facilities and the environment.

BACKGROUND

What actually happens to compostable plastics after they are disposed of is under increased scrutiny by policy makers, local governments, processors, and the public. Compostable plastics are notoriously difficult to differentiate from other plastics, leading to widespread confusion over which bin they should go in. This confusion is compounded by inconsistent acceptability and messaging across the county and region.

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. Additionally, research suggests that the remaining material can leave traces of harmful microplastics in the finished compost, which is land-applied and used to grow the food that we eat. Like consumers, processors have difficulty identifying compostable plastics, and as such, routinely remove all plastics, compostable or not, and send them to the landfill where, deprived of oxygen, they can release methane.

At the November 15 Joint WMA and Recycling Board meeting, staff will provide an overview of the environmental and health concerns with compostable plastics and will share research and updates on existing regulations and policy underway that have implications for the acceptability, distribution, processing, and messaging of compostable plastics in California.

RECOMMENDATION

This item is for information only.