# Compostable Plastics Friend or Foe

Eric Hudiburg - US Composting Council





The US Composting Council is a national non profit trade organization dedicated to the advancement of compost and composting worldwide.

We seek to be a friend to compost manufacturers!

### What is Compost

Compost - is the product manufactured through the controlled aerobic, biological decomposition of biodegradable materials. The product has undergone mesophilic and thermophilic temperatures, which significantly reduces the viability of pathogens and weed seeds and stabilizes the carbon such that it is beneficial to plant growth. Compost is typically used as a soil amendment, but may also contribute plant nutrients.

**AAPFCO Definition** 



Over simplified: Composting is process that occurs in an aerobic (i.e. oxygenated) environment when you have:

30-50 Parts

1 Part

At 40% - 60%

Carbon

Nitrogen

Moisture

Leaves

Coffee

Wood Chips

Food

Sawdust

Grass Clipping

Shredded Paper

Some Manure





### And that Oxygen is so Important

$$O^2 > 10\%$$

When you don't have Oxygen your compost can go anaerobic and release methane. Methane is 25 - 80 Times a potent as CO<sup>2</sup>



# Diverting Organic Material away from the landfill is the goal and to do that composters need:

- Nitrogen
- Moisture
- Consistent / Predictable Feedstocks
- Minimal contamination coming into their facilities

One way to get moisture and nitrogen is with post consumer food waste / food scraps.

<u>One Way</u> to get food scraps is by accepting compostable products as a feedstock. Those compostable products are vehicles to bring composters nitrogen.

### The USCC is sharing with you:

- 1) The Primer on Compostable Products that you see in front of you
- 2) The recordings from a three part webinar series produced for Compost Manufacturers covering compostable products and their place in the compost industry. We will see two excerpts from that series shortly.





We need to understand a little more about compostable products.

# Introducing Dr. Ramani Narayan from Michigan State University

Compostability is a complicated scientific subject and its best to leave that to the experts. So today we will hear from Dr. Narayan who presented for the US Composting Council about Compostable Products & Plastics in Part One of our three part series on Compostable Products



#### **PLASTICS -- BASICS**

#### Thermo)plastic

polymer or copolymer capable of being softened by heating and hardened by cooling ISO 19209 (2017)

**Note:** A carbon centric long chain (high molecular weight) polymer molecule that flows (with high viscosity) and takes the shape imposed on it, hardens on cooling.





## Friend or Foe

To the Compost Manufacturer, we hope friend! These products can bring in important components of the composting process!

You will hear from my colleagues whose business is to produce compost and make these decisions.

There are risks and considerations when it comes to receiving and processing compostable products at a compost facility.

To aid in that decision making process for the compost manufacturer we created the Decision-Making Guide to Accepting or Rejecting Compostable Products



# Finally, hear from some USCC members during this three part webinar series.





# Download all of the Documents Here

