

# Film & Bag Industry Environmental Initiatives

Frank Ruiz, Heritage Bag Co.

# Heavy-Metal Reduction

- “Heavy Metals” of concern include Lead, Cadmium, Mercury, hexavalent Chromium, & water-soluble Barium
- These elements commonly used as color pigments in plastics and printing inks
- Inexpensive, lightfast, high tinting power

# Heavy-Metal Reduction

- CONEG (Council of Northeast Governments) has limited heavy-metal content in packaging for years
- Related to concerns about metals leaching from landfills and toxicity of residual ash from incineration
- Film and Bag Industry supported AB455 which restricts use of heavy metals in packaging

# Heavy-Metal Reduction

- AB455 promotes a “level-playing field” for all suppliers
- Domestic industry concerned about imports – other countries do not share our environmental concerns
- Avoid concerns regarding use of recycled film

# PCR Usage

- Different sectors of film & bag industry have varying ability to use PCR
  - Not allowed for food contact
  - Not feasible for high performance applications (consumer trash bags) or those sensitive to contamination (stretch film)
- PCR quality & consistency a major concern

# PCR Usage

- Industry supports the development of quality guidelines to better understand material suitability for use
- Source separation is key to maximizing material value
  - Films made from a variety of plastics
  - PCR produced from mixtures of different films/plastics often yield poor film
  - Programs such as PBA “Bag-to-Bag” recycling maximizes PCR quality

# Compostable Film & Bags

- Organic material (including non-recycled paper) a significant percentage of waste stream
- Much of it can be composted
- Compostable bags and liners offer a sanitary and method of packaging organic waste

# Compostable Film & Bags

- Compost must be free of “residuals” to maximize its value
  - Minimize uncomposted plastic residue, inorganics, etc.
- ASTM Specification D6400-99 sets requirements for plastic to be considered compostable
  - Mineralization, or breakdown to water & CO<sub>2</sub>
  - Fragmentation into small pieces
  - Lack of Toxicity

# Compostable Film & Bags

- SB1749 requires all plastics sold in California as compostable must meet ASTM D 6400-99
- Plastics industry actively supported bill
- Several film and bag producers have developed and commercialized products which meet the standard

# Summary

- Plastic film & bag industry has active programs supporting environmental protection & waste diversion
  - Heavy metal reduction in film & bags
  - Improving PCR quality to maximize its utility
  - Compostable bags for organic waste diversion
  - Cooperation with state & local communities to increase film diversion from landfills