

# Government Assistance in Organics Collection Programs

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# Agenda

- Introduction
- What support is available
- Challenges
- Commitments from others



# Food Waste – by the Numbers

## The volume:

- Approximately 97 billion pounds of food is wasted in the US each year
  - About 3,000 pounds per second
- Food waste is the third largest component of the waste stream by weight
- Food scraps make up almost 12 percent of all the MSW generated in the United States
- Less than 3 percent of food waste is recovered.

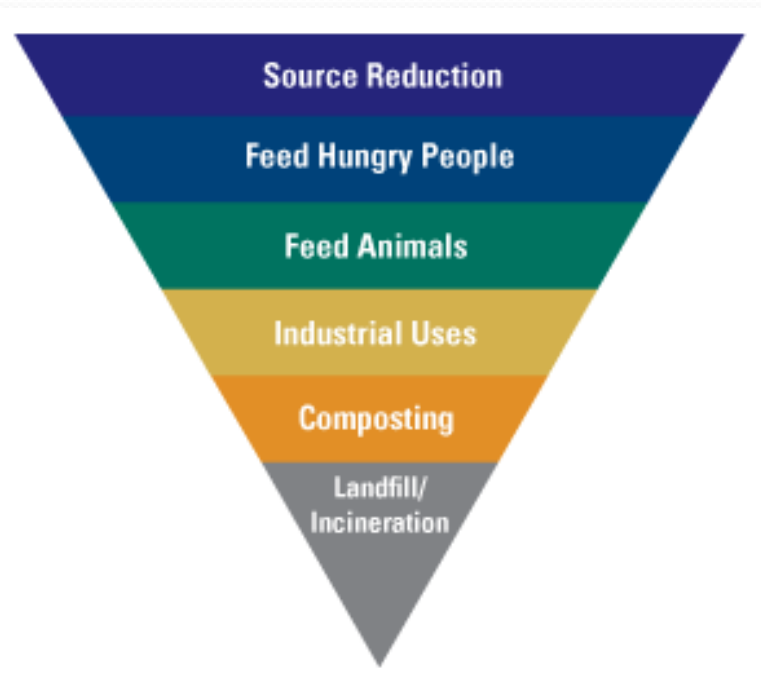
## The impact:

- \$30-40 billion in food waste losses occurring within the commercial or retail sector (e.g., restaurants, convenience stores)
- The decomposition of food in landfills produces methane
  - Methane is 21 times more potent than carbon dioxide.
  - Landfills are more than 20% of all US methane emissions.

# EPA's Food Waste Management Hierarchy

## Follow the food waste hierarchy:

- **Promote productive use of excess food**
  - **Source Reduction** – Reduce the volume of food waste generated
  - **Feed People** – Donate extra food to food banks, soup kitchens and shelters
  - **Feed Animals** – Provide food to farmers
  - **Industrial Uses** – Provide fats for rendering and food discards for animal feed production. Includes energy production
  - **Composting** – Convert food scraps into a nutrient rich soil amendment
- [www.epa.gov/foodrecovery](http://www.epa.gov/foodrecovery)



# Regulations – from the Federal Perspective

What are composters being asked to do?

- Generation & Disposal
  - Food waste is not hazardous waste
  - Regulations allow landfill disposal
    - With disposal allowed, composting programs have to be economically viable
- Disposal/Recycling Sites
  - EPA has delegated regulation to state governments
    - Landfills
    - Compost sites
    - Anaerobic digesters
  - This means differing regulations across the nation
  - Generally, fewer regulations apply to recycling activities than waste disposal
  - Many states do require permits for composting sites

# Compost Sites

- There are an estimated 216 food waste composting sites (Oct. 2010)
  - Many states require a permit for food waste composting
- There are many more composting sites that don't accept food waste
- Accept a variety of materials
  - Yard waste
  - Industrial wastes
  - Food wastes
    - Vegetable matter, or meat and dairy, or both

# On-Site Composting

- Managing compost inside of a restaurant or other facility
- Various systems are available
  - Traditional aerobic based systems
  - New systems based on microbes, heat, physical energy
  - What works best may be different for each user
- Remember – It's always good to have a use for the material that you are creating



# Compost Site Permitting

- Varies by state
  - Depends on what's being composted
  - Regulations are designed to protect:
    - Groundwater
    - Land
    - Air
    - Distance from neighbors
- Can include
  - Site details – distance to neighbors, zoning
  - Soil characteristics
  - Engineering designs for soil and groundwater protection
  - Storm water management
  - Possibly closure plans
- Time needed to get a permit can vary
  - 6 months, 12 months or more
  - Depends on the state, the site, and the amount of work that needs to be done

# Compost Site Preparation

- Concrete/asphalt pads for dumping loads
- Improved roads to the site
- Storm water management plans
- Securing feed stocks for the 'recipe'
- Equipment to manage the material
  - Processing equipment
  - Turning equipment
  - Watering equipment



# Compost Markets

- Composting isn't a success until it's sold
  - Good material to strong markets keeps the system running
  - Composters that don't have markets for their product struggle
- Uses for compost
  - Landscaping
  - Stormwater management
  - Land revitalization
- EPA has supported markets by:
  - Promoting the compost stormwater best management practices
  - Working with states to identify how regulations can promote compost use



# Support Governments Provide

- Federal
  - Information for markets
  - Calculators – Food Waste Management Cost Calculator
    - <http://www.epa.gov/osw/conserve/materials/organics/food/tools/>
  - Communication between states
- State
  - Permitting and regulation
  - Grants for composters or users of composts
  - Market development
  - Regulations for compost use where needed

The screenshot shows a Microsoft Excel spreadsheet titled "Microsoft Excel - foodcost.xls [Read-Only]". The spreadsheet is divided into several sections: "Food Waste Management Inputs", "Source Reduction", "Non-Perishable Food", "Pre-Consumer Prepared/Whole Foods, Trim Waste, and Plate Waste", and "Food Rescue". Each section contains a list of questions and their corresponding answers. For example, under "Source Reduction", the question "What type of facility are you?" is answered "Grocery Store". Other questions include "How many pounds of non-perishable food waste do you generate per week?" (0), "What percentage of non-perishable food waste are you willing to source reduce?" (0%), and "What is your average purchasing cost per pound for non-perishables?" (\$0.00). The spreadsheet also includes a "Notes and Instructions" section with detailed definitions and instructions for using the calculator. The bottom of the spreadsheet shows the "Cost Calculator" tab selected, with a "Ready" status bar at the bottom.

Food Waste Management Cost Calculator

# Support Governments Provide

- Local governments
  - Permitting (ex. zoning)
  - Economic development grants
  - Connection to markets, and material sources
- Universities
  - Extension programs promote use
  - Research and use recommendations



# Others that Support Composting

- Associations – recycling associations, industry associations
  - Advocacy
  - Links to other composters and recycling minded groups
  - Standard setting bodies, ex: quality and product certification
- The waste industry
  - Material needs to be hauled to composters
  - Support of other composters
  - Wastewater treatment plants

# Challenges

- Getting the management chain set up
  - Front/back of house
  - Waste haulers
  - Composter
- Getting support
  - Management
  - Staff
  - Through the 'hiccups' along the way
- Integrating it with your current
  - Waste management program
  - Back of the house routines

# Links

- EPA food waste page -  
<http://www.epa.gov/osw/consERVE/materials/organics/food/>
- US Composting Council -  
<http://compostingcouncil.org/>

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