Food Waste Diversion Program

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Introductions

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  VP, Board Member, NRC
  USCC Member
  RO Member (CRA, VRA, GRC, RFT)
  Editorial Advisory Board (Waste Advantage)
  Member Charleston Chamber
  Very active in Food Recovery programs
  (Feeding Hungry People is our #1 goal)
What is Food Waste?

- Food Waste and Compostables come in many shapes and sizes
  - Pre & Post consumer food scraps
  - Kitchen scraps, residential, commercial and industrial
  - Food production discards, catering discards, market spoils
  - Restaurant waste, soiled paper, waxy cardboard
  - Grocery store waste, proteins, spoils, floral, fibers
  - School waste, prepared foods, soiled paper, kitchen spoils
  - Hotel, Business and Campus waste
  - Organics / Food Scraps from events
What is Food Waste?

- Food Waste is only a part of what can be composted
  - Agricultural waste
  - Yard waste, land-clearing debris, wood & lumber scrap, recycled wood
  - Waxy cardboard, other fibrous materials
  - Compostable plastics (PLA’s and others)
  - Animal mortalities, meat production scraps and other production waste
  - Compostable packaging, container liners and utensils
  - Liquids, slurry, sludge and other manufacturing discards
What is Food Waste?

• Locations where food waste is generated:
  • ICI (Institutional, Commercial, Industrial)
  • Residential
  • Hospitals, Clinics, Nursing Facilities
  • Schools, Colleges & Universities
  • Convention centers
  • Correctional facilities
  • Hospitality industry
  • Catering
  • Corporations
  • Airports
  • Armed Forces
  • Food Manufacturing
  • Farming, Agriculture
  • And many more!!!
Options for material diversion:

• Source reduction – reducing the waste
• Feeding hungry people – 50 Million Americans go to bed hungry everyday
• Industrial uses, feed production
• Composting – Windrow, In-Vessel, Backyard, On-Farm
• Anaerobic Digestion – Renewable energy, Compostable residual
• Food Waste dehydration, digestion systems – No or low residual solids
Material Processing Methods: Continued

Feeding Animals

Anaerobic Digestion

In-Vessel, Rapid Decomposition

Vermicomposting
Clean, Easy and Less Expensive

- Separating food waste keeps trash collection much cleaner
- With “uck” out, it is easier to handle regular trash
- Greatly reduced frequency of trash collection saves money
- Not double-handling trash or food waste saves resource time
- No heavy lifting, reduced need for plastic liners
- No longer paying to dump “air”
Clean, Easy and Less Expensive

By removing all of the nasty, wet, smelly waste from your dumpsters you will see a noticeable difference in your dumpster area. No overloading issues, no odors, no insect infestation “or other unwanted scavengers” hanging around your dumpster.
Environmentally Friendly

- 35% - 60% of materials going to landfills are organics and could easily be diverted to other methods
- Reduces the production of harmful Green House Gases
- Reduces the amount of possible ground water contamination from MSW landfills
- Compost products bring many benefits
When food is disposed in a landfill it rots and becomes a significant source of methane - a potent greenhouse gas with 21 times the global warming potential of carbon dioxide. Landfills are a major source of human-related methane in the United States, accounting for more than 20 percent of all methane emissions.
Compost has the ability to help regenerate poor soils. The composting process encourages the production of beneficial micro-organisms (mainly bacteria and fungi) which in turn break down organic matter to create humus. Humus—a rich nutrient-filled material—increases the nutrient content in soils and helps soils retain moisture. Compost has also been shown to suppress plant diseases and pests, reduce or eliminate the need for chemical fertilizers, and promote higher yields of agricultural crops.

Source, US EPA
Extend life of landfill

- Landfills will be needed for many years to come
- Landfill diversion programs will help extend the life of landfills 15% - 150%
- Mandates and incentives are becoming more popular
- The cost to build new landfill is greater than $500,000,000 and can take more than ten years to build, permit and get ready for operation
- Landfill tipping fees have increased dramatically due to increased cost and value of airspace
- Diversion has financial advantages and is the fiscally smart thing to do
Assist in Economic Development

- By participating in a program that will divert your food waste from local landfills, you are helping to put your city on the map.
- Your city will be part of a unique group of municipalities that have decided to “do the right thing” and provide waste diversion options for their residential, commercial and industrial citizens.
- Be a proud participant and help promote this program with others. It will make a difference.
Path to Zero Waste –

• Zero Waste is more of a reality today
• Municipalities are starting programs that will help them get to Zero Waste
• Zero Waste can never be achieved without the diversion of food
• Millions of people have already made the commitment to change how they discard their waste
• Infrastructure for getting to Zero Waste is becoming available in new regions and is growing in popularity
HISTORICAL MONUMENT
Mount Landfill

O0000OH!

Once upon a time people used to dump here all their waste!
Establishing a diversion program

• Don’t re-invent the wheel here – let a seasoned professional service provider help
• Look for a strong Training and Quality Control process
• Program should be cost neutral or provide a savings over regular waste removal
• The container makes the program, make sure it is built to handle this type of waste
• Make your service provider be your partner in a successful program
• Track your progress (get diversion numbers)
• Schedule monthly or quarterly status meetings with service provider
Establishing a diversion program

- Please consider how you can divert edible food to help feed people
  - Make sure you know the rules
  - Find out how to divert edible food to the right organization
  - Ask your service provider if they offer assistance with any program
- For more information contact your local food bank or shelter
Containers and Frequency

- Your program will only be as strong as your container
  - Weight in container can be more than 300 pounds (64 Gallon)
  - This material is sometimes hot, always heavy and always wet
  - Holes or cracks in containers will lead to leaks and issues for your program, if you have such container issues, you will have to use liners
  - Service provider will either provide containers or provide container requirements for your program

- Weight of material makes regular containers hard to move around
  - Proper containers have caster wheels which make movement easy
  - With just two rear wheels, be careful not to overfill container;
    - Full containers will leak when rolled on two wheels
    - Heavy containers are easy to drop, thus resulting in spillage
  - Dragging containers full of food waste will create cracks and holes in containers.
Containers and Frequency

- Containers will vary depending on your service providers collection process
  - Know what to ask and what to look for, remember to right size
Training is critical

- The success or failure of your food waste diversion program will be heavily based on the education provided to you and your team
  - Key point – this is an easy program to learn and follow
  - Select a service provider that has a solid training program
  - Use pictures, diagrams in the training and place in areas where food waste is handled
  - Food waste generator training should be specific to your processes and food waste characterization
  - Always do follow-up training for team members missing first training session and for new team members
Training is critical

• The document shown below has been used for multiple food waste generators and has English and Spanish instructions. Bi-Lingual signage is helpful
Training is critical

- Training sessions using the documents shown above takes about 20 minutes to complete. Training sessions can vary depending on your situation, your food waste type and volume and your processing system or collection process
  - Training should be given to anyone on your team that regularly handles the food waste
  - A team champion should be identified. This person should take extra care in learning the processes and how to identify what is and is not compostable
  - Champion can also do in-house audits and follow-up training and can train new team employees
  - Champion can help in collecting information regarding the volumes being diverted and can keep track of container condition and cleaning procedures
Getting more out of your waste stream

• Look at your regular trash, what are you missing?
  • Many items can be eliminated by asking vendors to use compostable or recyclable packaging or by purchasing compostable products
  • Make sure you constantly update your team as a new item is proven to be recyclable or compostable
  • By reducing the amount going into your regular trash, you will continue to be able to reduce your trash disposal cost
  • This leads you closer to being ZERO Waste to Landfill
Compostable products “ASTN6400 Certified”

• An easy way of diverting more from your waste stream is by using compostable products.
  • If your location uses packaging, cups, plates, straws or clam shells, you can reduce all that waste by purchasing compostable products
  • These products are becoming easier to source and in most cases cheaper than regular products
  • The first place to look would be with your current product representative. If they do not have the products you want, you should ask your service provider for referrals
Quality Control and program compliance

• No food waste diversion program will be successful without keeping a daily focus on the processes of the program
  • Checking to see how well you and your team are doing needs to be a regular activity
    • Keep your eye on growing your diversion rate
    • Always look at what you are putting in your compostable containers
    • Train your team, don’t forget your new team members
    • Work with your service provider to get the most out of the program
• Make this program a part of your business
  • Promote what you are doing
  • Let your customers know how important this is
  • Get others involved
• Stay involved with your compost facility or processor.
  • Keep up with changes in the program and materials the facility can accept and process
  • Whenever possible, promote the use of compost soils
EPA Forms and other support tools

- Forms for obtaining bids from haulers and sourcing products and facilities can be found by going to the EPA website at www.epa.gov
- Make sure you participate in programs that have been approved by your local municipality
- You can find out much more by frequently going to the US Composting Council website at www.compostingcouncil.org
- If you want to learn more about SMART Recycling please go to our website at: www.smartrecyclingus.com
Promote your successful program

• Being a part of this type of program should be rewarding for you and your team. Make sure you let people know what you are doing and be a leader in your industry by helping others get involved
Questions?

• Thank you

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