

Resources for More Information



General Information

- EPA Organic Materials Web page: www.epa.gov/organicmaterials
- EPA Waste Information Where You Live: www.epa.gov/epaoswer/osw/regions.htm
- EPA and USDA. Waste Not/Want Not: A Guide for Feeding the Hungry and Reducing Solid Waste Through Food Recovery: www.epa.gov/epaoswer/non-hw/reduce/wastenot.htm
- Cooperative State Research, Education, and Extension Service: www.csrees.usda.gov/

Food Donation

- Bill Emerson Good Samaritan Food Donation Act: www.usda.gov/news/pubs/gleaning/appc.htm
- The National Hunger Clearinghouse: 1-800-GLEAN-IT; www.worldhungeryear.org/nhc_data/nhc_01.asp

Animal Feed

- USDA's list of state veterinarians: www.aphis.usda.gov/vs/sregs/official.html
- U.S. Centers for Disease Control and Prevention's directory of state and local health departments: www.cdc.gov/doc.do/id/0900f3ec80226c7a/ (scroll down page)

Industrial Uses

- Renderers' Association, Inc.: www.renderers.org/About_Us/index.htm (click on the "North American Rendering" button for a report on the North American rendering industry)
- National Renewable Energy Laboratory Biomass Energy Basics: www.nrel.gov/learning/re_basics.html

Composting

- EPA Composting Web site: www.epa.gov/composting
- U.S. Composting Council: www.compostingcouncil.org/index.cfm
- Massachusetts Department of Environmental Protection, Supermarket Composting Handbook: www.mass.gov/dep/recycle/reduce/smhandbk.pdf



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Washington, DC 20460

Official Business
Penalty for Private Use \$300

EPA530-F-06-004
July 2006



Putting Surplus Food To Good Use

A How-to Guide for Food Service Providers

Every day, food service providers, such as supermarkets, hospitals, universities, restaurants, and food preparation companies, make decisions about what to do with surplus or leftover food. This surplus food, also known as food scraps, food waste, or organic materials, includes all prepared foods, produce, bakery and dairy items, and meat. There are many ways food service providers can improve the environment and provide benefits to communities by reducing, reusing, and recycling uneaten or unused food rather than throwing it away. This guide helps food service providers start a food waste reduction and recovery program at their facilities.

To Recover or Not to Recover: Why Do It?

Separating and managing your food scraps can result in both economic and environmental benefits.

Economics: It Pays to Reduce and Recover Food Scraps

Reducing and recovering food scraps might save you money by:

- ▼ Decreasing disposal fees. Food banks and renderers often provide free pick-ups for excess food, and composting fees can be less than landfill/incineration tipping fees.
- ▼ Decreasing sewer treatment and electricity costs since food waste is not going down the drain.
- ▼ Decreasing purchasing costs because you are only buying what is needed.
- ▼ Increasing tax deductions for food donations to charities.
- ▼ Increasing revenue from selling compost made from food scraps.

Environment: Saving Resources And Reducing Waste

Putting surplus food to good use benefits the environment by:

- ▼ Creating a nutrient-rich soil amendment when composted, which improves overall soil health.
- ▼ Eliminating potential dumpster issues such as odors, pests, and fires.
- ▼ Conserving landfill space and decreasing methane and other greenhouse gas emissions from landfills.
- ▼ Decreasing the volume of waste managed at incinerators, which reduces air emissions and the volume of incinerator ash that needs to be landfilled.

Source Reduction

Feed People

Feed Animals

Industrial Uses

Composting

Shopping for Change

The Massachusetts Department of Environmental Protection and the Massachusetts Food Association partnered to increase organics recycling at supermarkets in their state. These two organizations established a voluntary supermarket recycling certification program to promote recycling and reusing food waste and other materials. Participating supermarkets save money and receive both positive recognition and waste load inspection regulatory relief. In August 2005, 62 supermarkets, nine haulers, and six composting facilities achieved a 60 to 75 percent recycling rate of food scraps and other organics. The supermarkets reportedly saved \$3,000 to \$20,000 annually per store by simply diverting organics!



A Lesson in Successful Partnerships

The San Francisco Recycling Program (SFRP) used stakeholder involvement to create a successful composting program at local schools. SFRP and Sunset Scavenger, a division of Norcal Waste Systems, met with interested teachers, principals, subcontractors, and custodial staff to discuss roles and responsibilities during the different steps in the composting process. Stakeholder meetings allowed SFRP to identify and solve potential problems and foster a sense of responsibility needed to sustain its programs. SFRP's stakeholder involvement also led to student and parent interest in food waste recovery. In 2000, the four public elementary schools and one private high school participating in the program diverted nearly 200 pounds of food scraps daily. The City of San Francisco uses its successful partnership approach to expand its food diversion program to haulers, composting facilities, dairy farmers, local colleges, and other organizations.

Reducing and Recovering Surplus Food

Surplus food can be beneficially used in a variety of ways. The food waste recovery hierarchy prioritizes methods of reducing surplus food.

Assess your food waste:

Take a quick look at the food waste you are throwing away and identify potential food recovery opportunities to decrease the amount you generate.

Conduct a food waste audit:

For more detailed information, track and collect data on the types and amounts of each food scrap item you are generating. Collecting these data will help you determine if some of your food waste can be reduced by ordering or producing less, how much could be sent to food banks or shelters, and how much could be recycled through animal feeding, rendering, or composting.

Plan for costs: There are costs related to collecting, transporting, and composting food scraps. Talk to neighboring organizations about also instituting food waste collection at their facilities to create a cost-effective route for your hauler. You also might be able to generate revenue by selling compost created from your food waste.

Start the program: Talk to national waste organizations, haulers, town planners, recycling coordinators, and even the mayor or town manager to get support and assistance for your food waste recovery program. Employee training is also vital to the success of a food waste recovery program. You might want to consider an incentive program for employee participation.

Decide what food waste recovery option works best for you: Use the information gathered from your waste assessment and audit to decide which food waste recovery option is best for your organization. The quality of your food scraps and your estimated generation rate will help you consider how to divert your food waste. To learn about waste disposal options and find haulers in your area, visit your state or county environmental department's Web site. You can also ask your current recycling or waste hauler about hauling your food waste to a recovery facility.

For information on working with local waste management companies to improve your recycling rates and cost savings, visit www.epa.gov/epaoswer/non-hw/reduce/wstewise/pubs/wwupda17.pdf.

Source Reduction — Reduce the volume of food waste generated

Source Reduction:

Use your waste audit to identify ways to decrease the amount of food waste you generate. Are there any trends in the types and amounts of food waste you produce? If so, consider changing your business operation to buy only what you use.

Feed People: You can donate unsold or excess food products that meet quality and safety standards to food banks. Many national and local food recovery programs offer free pickups and containers. The Bill Emerson Good Samaritan Food Donation Act (Public Law 104-210) protects food donors from legal liability. The text for this act is available through the U.S. Department of Agriculture's (USDA's) Web site at www.usda.gov/news/pubs/gleaning/appc.htm.

Feed Animals: Determine if local farmers or zoos use food scraps as animal feed. There are laws and regulations protecting animals from contracting diseases through consumption of food scraps. Contact your county agricultural extension office, your state veterinarian, or your county health department to find out about specific state regulations and contact information for licensed farmers. You also might find companies that convert food scraps into animal food products.

Industrial Uses/Rendering: Fat, oil, and grease can be rendered into a raw material to make biodiesel, soaps and cosmetics. Anaerobic digestion of food scraps and waste oils produces biogas that can generate heat and electricity, fiber that can be used as a nutrient-rich soil conditioner, and liquor that can be used for fertilizer.

Composting: Food scraps can be composted. Ask the composting facility you plan to use for a list of acceptable materials and hauling options. Another option is to compost on site. Before beginning such an operation, be sure you have adequate space, staff, end users, and support and cooperation from business or residential neighbors. Contact your local or state environmental agency to find out more about composting options in your area and more information on special issues that apply. Learn more about the science and technology of composting—including various methods—at www.epa.gov/composting/science.htm.

Feed Hungry People — Donate extra food to food banks, soup kitchens, and shelters

Feed Animals — Divert food scraps to animal feed

Industrial Uses — Provide waste oils for rendering and fuel conversion; and food scraps for digestion to recover energy

Composting — Create a nutrient-rich soil amendment

Landfill/Incineration — Last resort for disposal

Food for Thought

 Coca-Cola sends leftover food from its cafeteria and banquets to Atlanta's Table, a local branch of Foodchain (a network of prepared and perishable food rescue programs).

 Stonyfield Farm Yogurt donates leftover yogurt to local hog farms.

 The University of Vermont composts 115 tons of its dining hall food waste per year for an annual savings of nearly \$11,000 in avoided landfill tipping fees.



Hungry for the Basic Facts

 Almost half the food in the United States goes to waste.

 Approximately 100 billion pounds of food—about 3,000 pounds per second—is wasted in the United States each year.

 Food scraps make up almost 12 percent of all the municipal solid waste generated in the United States.

 Less than 3 percent of food waste is recovered.

 Food waste losses account for up to \$100 billion per year; \$30-40 billion occurring within the commercial or retail sector (e.g., restaurants, convenience stores) and \$20 billion from farming and food processing.

To learn more about food waste, visit www.epa.gov/organicmaterials.