



Managing Food Materials

According to the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA), more than one quarter of all food produced in America every year goes to waste and that \$31 billion in resources goes into the nation's landfills and sewer systems. This fact sheet is provided to encourage businesses such as food service providers, processors, distributors, and merchandisers to eliminate waste and recover/recycle food materials.

Food waste can produce many environmental impacts. For example, food materials discharged to a wastewater treatment plant will dramatically increase the cost of wastewater treatment, and if released into storm drains, will significantly impact a creek or river's ability to sustain aquatic life forms. Also, food materials discarded into the solid waste stream contribute to odor and the creation of greenhouse gases at disposal facilities. EPA and USDA estimate that diverting food residuals from landfills would improve air quality as much as taking 1,000,000 cars off American roads. Finally, food residuals in landfills serve as the catalyst for generation of leachate - the toxic soup that often drains from landfill into our drinking water aquifers.

Examples of what are considered food "residuals" include: preparation wastes, uneaten portions, grease, batter waste, dairy products, beverages containing sugar, and dressings. These food materials are excellent candidates for reduction, recovery, and reuse. Reducing materials at their source, coupled with recovery, reuse, and recycling prevents pollution and reduces, and in some cases eliminates, treatment and disposal cost. A successful waste reduction program can result in cost savings and possible generation of revenues. These activities also contribute to a positive public image for the company, benefits to the community, and protection of the environment.

Reduction at the Start: Ordering and Inventory Controls

Perhaps the most effective method for reducing waste is to prevent it in the first place. Proper control of raw goods, final products, and the waste streams associated with food preparation is an important source reduction technique. Improved ordering and inventory control significantly affect three major sources of waste resulting from improper inventory control: excess, out-of-date, and obsolete raw goods. Below are options for reduction at the start:

- Order bulk supplies.
- Terminate useless packaging from the vendor.
- Refuse samples that will become waste.
- Work with suppliers to return shipping materials and packaging.
- Purchase reusable items.
- Purchase only the amount of raw goods needed for a set period of time. This practice will help eliminate out-of-date and excess goods and products.
- Develop a review and approval procedure for all raw goods and products purchased. The primary purchaser can regulate the quantity of materials purchased by other personnel to reduce excess and out-of-date inventory.
- Clearly label all materials. Labels can indicate contents, storage/handling, and expiration dates.
- Rotate perishable stocks at every delivery to minimize waste from spoilage, i.e., first-in, first-out.
- Consider offering half or smaller portions as an option, to reduce the amount of uneaten food.
- Develop an hourly or daily production chart to minimize over-prepping and unnecessary waste.
- Store leftover hot foods from different stations in separate containers rather than consolidating them to minimize the chance of spoilage.

Donation of Food Material

Currently do you have excess edible food? Think of how that food could be used to help someone in need. In 1998, 36 million Americans lived in households that suffer from hunger or food insecurity. Food donation programs such as the Orange County Food Bank make donating simple. They can be contacted at (714) 897-6670. By donating food it helps achieve a winning menu of opportunity, halting a program where your staff can feel proud of being part of helping a neighbor in need, reduce food waste cost (recycling), and being good community partners.

Segregate Food Wastes for Beneficial Uses

To increase their recyclable potential, food materials should be clean and free of trash such as paper, glass, and plastic. Also, depending upon the requirements of recyclers, solid food wastes should be separated from liquid food wastes to enhance their recyclability.

Rendering

Free grease is grease that has not been mixed with water. It is largely generated from pots, pans, grills, and deep fat fryers and comes from butter, lard, vegetable fats and oils, meats, nuts, and cereals. If kept out of the drains and handled separately, free grease may be rendered. Rendering facilities may purchase free grease and provide storage and collection. The market price depends upon factors such as volume, quality, and hauling distances. See fact sheets for Restaurant Oil and Grease Rendering and Best Management Practices for Fats, Oils, and Grease for further detail about management of grease.

Composting Food Wastes

"A rind is a terrible thing to waste!" Composting is an excellent way to turn a costly disposal problem into a source of soil nutrient and potential income, reduce air and water pollution, and save landfill space. The use of compost in gardening and agriculture reduces soil runoff and reduces the need for using chemical fertilizers, which protects California's waterways.

Businesses interested in diverting waste to composting could open their own compost facility or investigate the possibility of using local government or private compost facilities already in operation.