

A FACT SHEET FOR

Managing Food Materials



Grease Goblin

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. That is \$31 billion in resources that 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 of American roads. Finally, food residuals in landfills serve as the catalyst for generation of leachate - the toxic soup that often drains from landfills 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 excel-

lent 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 costs. 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control significantly affect the three major sources of waste resulting from improper inventory control: excess, out-of-date, and obsolete raw goods.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.

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- 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 and 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 amount of uneaten food.
- Develop hourly or daily production charts 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 suffered from hunger or food insecurity. Food donation programs such as the Atlanta's Table project of the Atlanta Community Food Bank make donating simple. Both the federal and state Good Samaritan food law protects food donors from liability. More than 200 restaurants, caterers, cafeterias, corporate dining rooms, hotels, convention centers, and other food service providers who currently donate roughly 400,000 pounds of food materials each year to this program. By donating food it helps achieve a winning menu of opportunity, having 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. To find out more

information or to join this worthy effort call Jane Hayden at (404) 892-FEED, extension 233. Table 1 lists Georgia food bank/food donor programs.

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 P²AD's 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 protect Georgia's water ways.

Businesses interested in diverting wastes to composting could open their own compost facility or investigate the possibility of using local government or private compost facilities already in operation. Contact P²AD at (404) 651-5120 or (800) 685-2443 to explore your composting options.

Table 1. Georgia Food Bank and Food Donor Programs

Location	Organization Name	Contact	Telephone
Atlanta	Atlanta's Table	Jane Hayden	(404) 892-FEED x233
Savannah	Second Servings	Pauline Knight	(912) 236-6750
Macon	Unto Others	Ron Raleigh	(912) 743-4580
Athens	Full Plate	Jim Valente	(706) 546-8293

Facility Waste Reduction Program

Management Commitment. The most critical step to successful waste reduction is commitment by the owner(s)/managers of a facility to a waste management plan. A detailed waste reduction program should be developed that outlines policies and procedures for dealing with waste and assigns individual responsibilities for all waste related activities.

Employees will be aware of the degree of commitment by management and will rise or fall to the level that is expected or allowed. It is, therefore, important to have realistic goals that can be achieved, recognized, and rewarded.

Employee training is a significant component of a waste reduction program, and all employees from managers to the clean-up crew should be included. The training sessions, which should be repeated on a regular basis, should teach waste awareness, the impact of various food wastes on the wastewater stream, proper waste handling methods, and the importance of keeping non-food garbage out of food waste containers. Contact the Pollution

Prevention Assistance Division at (404) 651-5120 for assistance with setting up training programs.

An Employee Suggestion/Awards Program should be established to maintain employee motivation. Employees can be rewarded for proper waste handling practices. Current incentive programs ("employee of the month") can also incorporate employee waste handling practices as evaluation criteria. An employee awareness program should be highly visible, and managers and supervisors must strongly support these programs.

Also, **employees should be solicited** for ideas/suggestions for conducting efficient dry cleanups, segregating food wastes, or recycling other solid waste products. Employees also may have ideas about methods to generate less food waste or more effectively manage inventory. The most effective waste reduction programs make use of a team concept in which employees at all levels make contributions.



The **Grease Goblin** is the mascot for P²AD's Oil and Grease Management Program. He serves as a reminder to keep grease out of sinks and drains before it becomes a nuisance.

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