

A Work of Ort*: How to Include Food Scraps in Your Office Recycling Program



*Ort is a scrap of food left over after a meal

Those of us who work in an office probably eat at least one meal there, and sometimes the leftovers are compostable. Since home composting has become more popular, workers are now starting to ask if they can compost at the office, too. In addition to increasing recycling, removing food scrap from the regular trash can also save money in waste disposal fees.

If your office currently does not recycle the basic items, **do not start** an office food scrap composting program just yet! Start a foundation and mindset for employees by establishing a recycling program for the bottles, cans, paper, etc. and then, explore food scrap recycling. Here are some questions to get you thinking about beginning composting at work.

Is a Food Scrap Composting Program Right for Your Office?

Maybe. The first question to ask is "If we start collecting food scraps, do we have a place where it can be taken to get recycled/composted?" If the answer is "no", then you should not start collecting food scraps until you can answer "yes" to that question. This may mean finding an off-site composting facility that will accept your scraps and a means by which to get them there, or establishing a compost area on-site.

Where Will You Bring Your Food Scrap?

Bringing food scrap off-site is probably the best answer for larger offices and those with cafeterias. However, the options are limited at this time. There are presently only two privately operated permitted/approved compost sites in CT that can accept source separated food scrap (i.e. no trash included). Those sites are located in New Milford (New Milford Farms) 203-210-0250 and Ellington (GreenCycle) 860-674-8855, ext. 304. As demand increases, the infrastructure should expand with more facilities. Food scrap generators near the border should check for options in neighboring states.

If you are in the vicinity of those facilities, contact them to make sure that they have room for your materials. Ask what they will accept, their quality standards, and how they want it delivered. Then, work with your food service provider and trash hauler to arrange for collection and transportation. The cost may be prohibitive if long-distance hauling is required.

Could You Manage On-site Composting?

On-site composting may be possible for smaller offices (less than 30 people) or those located in rural areas with grounds on which to place a compost bin/area. It has also been successful at schools, universities and prisons. These larger on-site composting areas should be self-contained or under cover (pole barn, clear-span fabric buildings, etc.) to avoid excessive runoff of nutrients and for better process control. A home-made bin, commercially purchased home compost bins, or an automatic self-contained kitchen compost unit may suffice for small offices. Very small volumes can be handled in a worm composting bin, although these are sometimes a challenge to maintain without attracting flies.

All the best management practices for composting should be followed to avoid creating odors, runoff, and flies. The beauty of on-site composting is that the resulting compost can be used in your office landscaping, or given to staff for their own gardens.

Assuming you <u>do</u> have a recycling destination for food scrap, use the rest of this information to guide your efforts:

What is a Waste Assessment and How Do I Perform One?

Consider doing a Waste Assessment before deciding to collect organics. A Waste Assessment, sometimes called a Waste Audit, is a measurement of all the types of waste that is generated at a specific location. These assessments or audits are usually conducted over a specified time period (day or week), and could be done several times per year if waste generation is known to fluctuate (i.e. on a campus or school setting where volumes decrease during breaks). There are consultants who offer waste assessment/audit services, but you can perform one yourself using forms developed by the Northeast Recycling Council in their publication entitled "Recycling Makes Sen\$e": A Waste Prevention Guide for Businesses, Schools & Municipal Offices (see Appendix B & C).

The results of these audits uncover inefficiencies, wasteful practices, volumes of different waste types generated, and opportunities to improve recycling. Knowing more about your current practices helps you plan for change and improvement. With respect to organics, knowing the types and amount of food scrap and yard waste generated will allow you to estimate the size of collection containers, storage requirements, size of compost bin/area if composting on-site, pick-up frequency, tip fees, etc., and you will have done all your homework before you talk to your building manager, hauler and organics recycling facility.

Start Small - Do a Pilot

It might be worth doing a pilot (small-scale trial) in part of your building to determine how your employees respond to a food scrap recycling program If there is not enough interest or you continually find trash in the pilot collection bin, then you will know that you have a more challenging task on your hands, and lots of education to do. On the other hand, if you get an overwhelming response and people are putting the right items in the bin, you can focus more on other aspects of developing the program. Besides gauging potential participation, the pilot will be testing the effectiveness of your instructions/educational materials & signage, commitment of the volunteers running the program, troubleshooting, volume of food scrap, and reactions from management, etc. Starting small allows you to address and correct issues that could be problematic at full-scale.

Who's in Charge?

Good question. In most cases, food scrap recycling is probably going to be initiated by a single or small group of employee volunteers that are passionate about composting and have a burning desire to bring their dedication about this to the office. Work with your Green Team, as they already have alliances with the building manager and support from management.

Who's in charge may change over time, and it may be that different people are "in charge" of different aspects of the program. But, it is definitely something that needs to be determined early in the process to avoid miscommunication. In the beginning, it may be a Green Team member that leads the research, finds resources, and presents the proposal to management. Once the proposal is accepted, the pilot may be totally volunteer-based with staff doing the education, collection, hauling, and composting (if on-site). Later, as the program matures and expands, building management may want to take over the collection and hauling aspects of the program. It is advisable that the person(s) "in-charge" are permanent employees and agree to be involved for the long-haul in order to maintain consistency and to gain experience with the issues that arise and how they are resolved. Once the program is second nature and part of the daily routine for both staff and building management, others can be taught the ropes and take over if necessary.

Where Should Food Scrap Collection Containers Be Placed?

The general rule of thumb is to place food scrap collection containers in high food scrap areas such as lunch rooms, food preparation areas, or office kitchen areas. As with any good recycling program, the containers should be clearly labeled and placed near a garbage can for convenience and to help reduce the possibility of contamination (with trash). For special events (e.g. parties, large meetings, trainings, etc.) provide a 5-gallon labeled bucket for food scraps. Space constraints and the schedule of when the food waste is picked-up from the building (if being taken off-site) will likely determine the size and placement of the aggregation container.

Don't try to collect food scrap from areas that are open to the public (i.e. elevator vestibules, lobbies, conference rooms, etc). First of all, not much food scrap is generated at these areas; secondly, visitors have not been educated and "trained" to follow the guidelines (or won't take the time to read signs); and lastly, the food scrap containers will inevitably be contaminated with trash.

What Containers Should We Use?

Any rigid, leak-proof, and covered container can be used. The container should look different than the other garbage and recycling containers. Green is a typical color for food scrap collection containers, but not necessary. A metal or plastic "step-on" can is another option, which allows for hands-free lidded operation. For very small offices, a lidded plastic ice cream, yogurt or other food tub can be repurposed into a countertop collection container. These small containers can also be stored in the refrigerator instead of on the counter to retard decomposition and gain an extra day or two before they need to be emptied. Every container should be well labeled. Post colorful, easy to read signs about what should and should not go into the container.

To Bag or Not to Bag?

A bag or liner will help to keep your internal office food waste containers clean. If no liner is used, you will need to wash the containers frequently. Because regular trash bags are made of plastic, you cannot include them in the compost program. You can, however, use a regular trash bag and dump the loose contents into your service container or composter. Another option is to use a regular plastic liner with a brown paper bag insert that is removed daily. The brown paper bag is acceptable for composting, and the plastic liner is there in case the paper bag leaks. Compostable plastic bags are discussed below.

Should We Use Bags, Liners and Food Serviceware Labeled "Biodegradable" or "Compostable"?

There is a lot of "green-washing" surrounding the words "compostable" and "biodegradable" which makes it hard to know or trust that you are getting what you pay for, and that the product will perform as intended. Before buying a product that claims to be "biodegradable" or "compostable," there are a few key factors to consider. Calling a product "biodegradable" suggests that it will degrade over time by natural processes, but that doesn't guarantee that the product will break down completely, or on its own. Calling a product "compostable" specifically means that the product can break down into natural elements when composted and be used to make soil, fertilizer, or mulch. Both biodegradable and compostable products need the right conditions to decompose.

If you are using a home compost bin at the office or have a small compost pile, "biodegradable" or "compostable" products will not serve your needs and will end up littering your compost pile. They are not designed to decompose under those conditions; therefore it does not make sense to invest in these

products. If you are sending your food scrap to an **off-site** composting facility, **check with that facility** to see if they accept **compostable** products, and exactly **which brands they accept**. ASTM International has established specific criteria to determine if a product is compostable, and the <u>Biodegradable Products</u> <u>Institute</u> (BPI), an independent organization, uses those criteria to conduct third party scientific studies on products. If a product passes the tests conducted by BPI, and meets ASTM requirements, it is given the official "BPI Compostable" label.

Composting facilities that accept compostable products usually require that products meet ASTM Specifications <u>D6400</u> and/or <u>D6868</u>, **and** are <u>BPI Certified</u> for *compostability*. Check <u>BPI's Directory of Certified Compostable Products</u> to ensure that products have the BPI-certified label before you buy them, and make sure they are sent to a commercial composting facility which accepts them after use.

How Often Should Food Waste be Collected?

It's hard to say exactly because every office is different, and it depends on usage – but it should be frequently. The collection containers at the point of generation (lunch rooms, etc.) should be emptied daily in order to minimize odors and flies, and to keep colleagues and building management happy. If this is being done by employees, set up a rotating weekly schedule where one team member assumes the responsibility of emptying it every day for one week (it's easier than daily assignments). If the janitorial service has this responsibility, train them on what to do and add it to their daily checklist.

The aggregation point (wheeled cart on loading dock, etc.) should be emptied as often as possible, usually no more than every other day. If there is a refrigerated garbage room on site, then you can buy yourself a little extra time. It may require more frequent emptying in the summer, and less in the winter. An agreement to provide daily removal is usually warranted at start-up, but it may be possible to extend to servicing only two or three times a week.

Recordkeeping and Metrics

Recordkeeping is important if you want to show the value of your organics recycling program. One day, you may need to justify the office food scrap recycling program. Keeping good records and analyzing your data will help you quickly answer questions like: How much money have we saved? How much did we recycle? How many pounds did we keep out of the waste stream? How many metric tons of carbon equivalents (MTCE's) were reduced? How did we overcome that issue with ...? How much staff time does it take to manage the program? How much compost did we produce and where did it go? So, be prepared and record the daily pounds of food waste recycled, at least until a baseline has been established, then extrapolate. Keep a running journal of issues that come up (good or bad), and how they are/were addressed. You will thank yourself later.

Should We Test the Compost That We Make?

Before using the compost that you make, test its nutrient content. Young compost can be high in soluble salts (especially if you are adding processed foods like frozen meals) and/or ammonia nitrogen, which can burn the roots of young plants – not the result you want. Compost needs a period of time to "cure" and allow the microbes and macro organisms to "finish" the decomposition process. It may look done as soon as it comes out of the bin, but it may not be. Find a place outside to let it "rest" for a few months, then have it tested. In CT we are lucky to have the CT Agricultural Experiment Station (CAES) that will perform a nutrient test on your compost for free. Based on the results, they can determine and suggest application rates of the compost and other soil amendments to successfully grow plants. Visit the CSES soil testing webpage for information on how to take a sample and where to send it.

Get the Word Out to Colleagues

Education is so important to success. In addition to signage and labels on the containers, employees need an initial tutorial and then consistent periodic reminders about how to participate. Develop information to give to new employees and include it in the new employee orientation/handbook. Use the internal office website to recruit volunteers, explain the program, report results, and post photos. Emails are great reminders too. Give a creative name to the composting team so they are easily remembered – like "The Organic Mechanics" (DEEP uses this one), or the Organics Recycling Team (ORT), or the Office Organics Team (OOT) and be sure they are available to answer questions.

Reward Employees!

Sometimes all it takes is acknowledgement of a job well done to keep employees committed to the program and to foster a sense of accomplishment and camaraderie. A little recognition of the above-and-beyond employee efforts can go a long way in establishing a positive composting "culture" at the office. Dip into the coffee fund and throw a pizza party or ice cream social as a way to thank the organizers and staff. If your office has an employee recognition program, nominate the team for an award. Even the smallest thank you will be greatly appreciated.

Close the Loop!

Coming full circle is important to convince participants that their efforts have been worthwhile, and to complete the recycling process. Use the compost that you have created (if on-site) in your landscaping and flower gardens around the office building. Plan an Earth Day, Arbor Day, or a CT Recycles Day event and give away seedlings planted in soil amended with your compost, or small bags of your compost to employees. If your food scrap is sent off-site, purchase compost from that facility for your landscaping needs. Promote all of this on your employee web site with photos.

For more information on Composting and Organics Recycling, please visit our DEEP website at www.ct.gov/dep/composting or contact K.C. Alexander, kathy.alexander@ct.gov, 860-424-3239

Note: This document is a long version of a one-page fact sheet that was developed by the CT Department of Energy & Environmental Protection Green Team for a workshop called "Going Green Makes Sen\$e" which was presented on September 28, 2011 to State Agencies, Municipalities, and Businesses on greening their offices.