

Food Waste Separation Made Easy

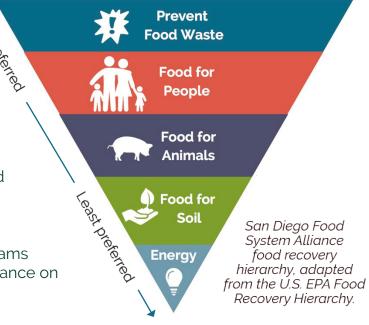
Best Management Practices for CA and San Diego County

Who is this document for?

This food waste separation guidance document is part of a series aimed at helping commercial food service providers – e.g., restaurants, hotels, grocery stores, corporate cafeterias, and schools – reduce the volume of organic waste they send to landfills. Achieving California's ambitious diversion goals will take commitment from players across the food service value chain; these tips are particularly geared toward decision makers, trainers, or advisors within California's food service industry.

As shown in the diagram on the right, there are a number of options for diverting food waste from landfills. All of these strategies are more effective when generators have systems in place for separating out organic material from landfill-bound waste.

Prevention should always be the top priority but the most successful diversion programs employ strategies across the hierarchy. See the other tip sheets in this series for guidance on food waste reduction and prevention, and food donation.



Why separate organics from other trash and recyclables?

In California, **food waste makes up 18% of the waste stream** by weight. When sent to landfills, it decomposes and releases methane, a potent greenhouse gas. Landfills, as a result, are responsible for 21% of the state's methane emissions. Keeping food waste out of landfills can mitigate significant greenhouse gas emissions and enable a range of beneficial end uses, from feeding the hungry to resource recovery through composting and/or anaerobic digestion.

California has developed a strong policy approach to tackling the food waste problem, including two complementary bills that mandate diversion from landfills.

- Mandatory Commercial Organics Recycling (AB 1826, 2014) establishes the volumetric thresholds at which regulated businesses are required to divert food waste from disposal. As of January 2019, businesses generating 4 cubic-yards per week of solid waste shall arrange for food waste recycling service (solid waste means trash, recycling, and organics). In 2020, if statewide disposal of organics has not decreased by 50% of the level disposed in 2014, there is a trigger to reduce the threshold to 2 cubic yards.
- CA Short-Lived Climate Pollutant Law (SB 1383): establishes targets to achieve a 50% reduction from the 2014 level of statewide disposal of organic waste by 2020, and a 75% reduction by 2025 (organic waste means solid wastes containing material originated from living organisms and their metabolic waste products, including but not limited to food, green waste, landscape and pruning waste, applicable textiles and carpets, wood, lumber, fiber, manure, biosolids, digestate, and sludges). The law also establishes an additional target that at least 20% of currently disposed edible food is recovered for human consumption by 2025.

The environmental and social benefits of food waste reduction and diversion often come with a financial upside too. Many commercial entities realize **cost savings through reduced purchasing and lower hauling costs**.



Ready to get started?

There are four key steps to separating and diverting excess food and food waste from landfills:

- 1. Assess the quantity and types of landfill-bound organics. A brief audit will reveal the amounts of edible and inedible, pre-consumer and post-consumer, vegetative produce, and packaged and unpackaged food scraps.
- 2. Research waste prevention, recovery, and recycling options available, given current food waste profile found by the audit. The audit will uncover opportunities for preventing food waste, diversion to food donation, animal feed, composting, and anaerobic digestion.
- **3. Implement** in-house procedures to source separate: bins, servicing logistics, outdoor storage, signage, and training.
- **4. Monitor** the program and progress, tracking factors such as, diversion quantities, contamination, and employee, and customer engagement.

Ask your hauler to assist with a waste audit, or contact:

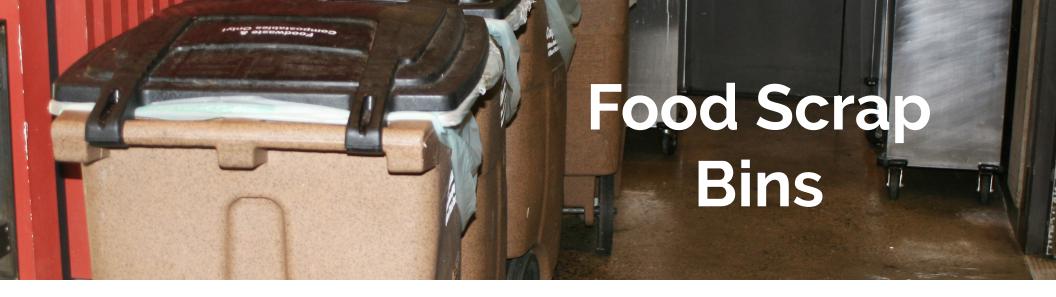


(760) 436-7986 ex. 700 compost@solanacenter.org



(888) 813-8552 wastedfood@cetonline.org





Type and Placement

- Food scraps should be collected in dedicated receptacles.
 - Many kitchens equip each food prep station with a small container that is emptied into a larger centralized receptacle when full.
- be uniform (i.e., color and size) so that they are easily identified and not confused with other bin types. Contact your city to find out what color/labels should be used for receptacles.
- Food scrap receptacles should be clustered with those for other materials (i.e., trash and recycling) to make separation easy and to encourage compliance.

Servicing

- Food scraps should be removed from kitchens/dish rooms at the same frequency as trash.
- Hauling frequency should be set to minimize odor, insects, and pests:
 - 64-gal carts (also known as totes) and dumpsters should typically be emptied and hauled for processing twice per week in warm climates; high odor generators, such as seafood restaurants, may require more frequent emptying;
 - Compactors can be serviced once per week since they are fully enclosed. These are typically 20 yd³ or more and reserved for very large generators.

Outdoor storage

- Outdoor storage surfaces should be non-permeable and sloped to drain.
- Some communities require trash/ recycling areas to be fenced or otherwise out of view. Businesses/ institutions can check with their local Planning or Health Department to determine requirements.
- Dumpsters, carts, or compactors should be water tight, capable of being closed and locked, and accessible for cleaning.
- Carts, dumpsters, compactors, and other bins should be cleaned often to prevent odor and pests. High pressure pumps, hot water, steam and detergent should be used as necessary.

Signage

- All **receptacles should be clearly labeled** for their intended purpose i.e., food scraps, recycling, trash.
- Signs should be **picture-based with minimal words**, and should include pictures of what can and cannot be put in the receptacle. Haulers may be able to provide signage.
 - Ideally, pictures should be tailored for the generator, showing examples of waste that is actually generated at the site.

Training

- Train all staff in new sorting and waste separation practices, and incorporate training into onboarding processes for new employees.
- Monitor contamination levels in each receptacle or ask haulers to do so and use instances of contamination to remind staff about separation guidelines.
- **Provide periodic "refreshers"** on source separation and waste management guidelines and goals. Consider appointing staff members to be in charge of monitoring and training peers.







Sector spotlight: Food Waste Hauling

The Park Hyatt Aviara Resort, Golf Club, and Spa The Park Hyatt Aviara Resort, Golf Club, and Spa is a five-star property on the coast of Carlsbad in San Diego County. The hotel works with hauler, RMG, to run a pre-consumer food waste recycling program. RMG provides clean 35-gallon green totes with laminated signage, which they service three days per week. The hotel typically serves 1,430 meals a day and diverts **an average of 1.6 tons of food waste per week** to local farms for use as animal feed, and to compost plants.

Management at the Park Hyatt Aviara communicated the new process to each culinary team and implementation went smoothly. "Most employees were supportive and excited to contribute to bettering our environment and adhered to the program right away," reports Executive Chef, Pierre Albaladejo.

Not only has the program made environmental sense, it also **saves the hotel \$600 per month** in hauling and disposal fees. With the success of their pre-consumer food waste recycling program, the Park Hyatt Aviara has their sights set on implementing post-consumer food waste diversion next.

Sector spotlight: Onsite Compost Management

Cal State University San Marcos

Cal State University San Marcos (CSUSM) has set the ambitious goal of being zero waste by 2025, and in the interim, aims to hit an **80% recycling rate by 2020**. Source separation of organics is a critical piece of this initiative. CSUSM operates an onsite compost facility for pre-consumer food scraps – such as coffee grounds and fruit and vegetable trimmings – to which they send an average of **3,700 pounds per month** when campus is in session.

Across campus, the three coffee venues and the kitchen in CSUSM's dining facility are equipped with back-of-house compost bins for collecting food scraps. In addition to these four locations, they also have **four departments conducting trial pre-consumer food scrap collection within their departments**. This accounts for only a small amount of food waste, but is an important demonstration as they work to build out the program campus-wide. Facility Services staff provide daily pick up of food waste and deliver it to the campus compost location using electric carts. **Staff are trained** to place only pre-consumer food scraps and coffee grounds in the compost bins, and signage is placed above the bins to help prevent contamination. **Grounds workers maintain the compost** and when ready, use it throughout the campus for landscape projects, including the campus' Sustainable Food Project Garden.

Further up the food waste hierarchy, CSUSM is also on a mission to reduce food waste. Through a variety of strategies, they are working with their Cougar Pantry (an on campus food pantry), Sodexo (their food service provider), and other departments across campus to donate and prevent food waste. Using social media, newsletters, and campus announcements, they have **utilized Save the Food materials** to engage the campus community in this effort.



Sector spotlight: Food Scrap Drop-Off Program

Solana Center for Environmental Innovation

Solana Center for Environmental Innovation's Food Cycle program demonstrates the role of community-scale composting in raising awareness about food waste and diverting it from landfills. Food Cycle serves over 100 households and organizations, plus local events, amounting to a **weekly average of 70 pounds of food scraps**, which the Center converts to nutrient-rich compost in aerated static piles.

Participants in the program are provided with airtight buckets and bokashi bran, a material inoculated with microbes that ferment food waste. When sprinkled on each new layer of food, bokashi helps eliminate foul odors and vectors. **Using bokashi in conjunction with airtight containers also enables inclusion of meat and dairy**, and allows Solana Center to store the material onsite until they have composting capacity.

At an average frequency of every 5 weeks, participants bring their full bucket to Solana Center. They pay minimal fees at sign-up and for each drop-off, which go toward the costs of running the program; however, it is also sponsored by foundation grants, local jurisdictions, a local hauler, and some volunteer labor provided by participants. All participants have **access to finished compost**.

Community-Scale composting operations like Food Cycle have a unique ability to engage the communities they serve and showcase the benefits of diverting organic waste to composting. Food Cycle has been a resounding success in terms of generating local dialog about food waste, and facilitating an **opportunity for community involvement and cooperative action**.

Resources

<u>Find-a-Composter Portal</u>, BioCycle

<u>Less to Landfill Program</u>, food waste diversion assistance from Solana Center <u>Save the Food, consumer focused food waste reduction tips</u>, Natural Resource Defense Council <u>RMG</u>, local hauler that offers organics collection services

Wasted Food Solutions Toolbox, Center for EcoTechnology





The Center for EcoTechnology (CET) helps people and businesses save energy and reduce waste. CET acts as a catalyst to accelerate the development of a vibrant marketplace to divert wasted food from the commercial and institutional sectors. We have been a leader in the wasted food reduction and diversion movement for more than 20 years, implementing some of the first wasted food composting programs in the country, and contributing to effective public policy.

We believe that better managing wasted food is critical in order to address climate change, feed more hungry people, and grow our economy. If you are a city, state or federal agency, industry group or foundation, and want to tackle the issue of wasted food, please contact us!

Phone: (888) 813-8552 | Email: <u>wastedfood@cetonline.org</u> wastedfood.cetonline.org

This material is based upon work supported under a grant by the Rural Utilities Service, United States Department of Agriculture.

Any opinions, findings, and conclusions or recommendations expressed in this material are the sole responsibilities of the authors and do not necessarily represent the official views of the Rural Utilities Service.

The Center for EcoTechnology is an equal opportunity provider and employer.