

ORGANICS COLLECTION – A FUTURE FOR FLORIDA?

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The organic fraction of the MSW waste stream, which includes food scraps, yard waste, wood waste, and mixed paper, represents about 40–60% by weight. Multifamily residential units do not generate yard waste and wood packaging, so organic wastes are significantly lower, 15–20 by weight, still not an insignificant amount if the community has a high diversion goal.

According to the US EPA, Americans generated nearly 35 million tons of food waste in 2010, with 97% of it disposed at landfills. As such, many communities in recent years have been evaluating options to handle organics beyond the traditional approach in just supplying information on municipal web sites about the benefits of backyard composting. Further, many state and provincial governments have begun promulgating policies and regulations that target the recycling of organics prompting local solid waste agencies to develop advanced municipal curbside collection programs.

A key question for the local solid waste agency to answer is what types of organic wastes will be targeted for collection and processing. For example, some programs accept food wastes, but do not collect meat or fish wastes due to significant odor and processing issues. For example, the plastic lining in some disposal cups, as well as in coated paperboard products, can pose a contaminant problem for composters. Also, other programs restrict the collection of pet wastes and diapers due to contamination concerns. The following sections briefly discuss some of the facets of these organics recycling initiatives.

DROP-OFF PROGRAMS

Historically, many rural and smaller communities where residents already self-haul refuse, yard waste drop-off can be the cost-effective way to recover a significant amount of organics. Residents who can conveniently haul their yard clippings and other organic wastes to a nearby drop box will participate at levels similar to curbside collection systems.

Also, mobile drop-off centers can help serve a number of adjacent communities, especially if these centers offer reduced or free tipping fees for source-separated organics. Food waste collection at drop-off centers has often-times proven a bit more complicated than recycling because the materials cannot sit around as long as stacks of newspapers can, but a convenient network of community locations can overcome the barriers to frequent drop-offs by residents.

BULK COLLECTION

Another simple collection system for organics is for residents to rake their yard clippings, leaves, and brush into piles on the edge of the curb. Trucks with vacuum equipment can then remove the piles and haul them away. If vacuum equipment is unavailable, the piles must be placed in the street so loaders or sweepers can get access to the piles to remove them. Most local governments have dump trucks and loaders and consider this option a less expensive to implement a yard waste collection program.

This system would only accommodate yard waste since food wastes handled this way would create too much odor and vector attraction. Piles of yard waste in the street could cause traffic problems as well as plugging municipal storm drains. Wet yard wastes piled in this manner could also produce unpleasant odors.

This method of collection could easily be implemented because it does not require any more effort on behalf of the participants than what is normally expended taking care of their yards. But, the various negative issues introduced with this method would require careful consideration by decision-makers before implementing.

CURBSIDE COLLECTION PROGRAMS

According to a 2013 survey in the United States, there are more than 214 source-separated organics collection programs in operation and the effort is gaining traction in recent years. That number is up from only 20 programs in 2005. While each of these programs has its own



method for food waste collection, several major trends are apparent in both the residential and multifamily sectors.

key challenge to residential collection is assisting residents in getting over the “ick factor” of composting organics. Many misconceptions exist regarding storage of organics in households, including the space requirements, public health risks, odor, and rodent problems. Surveys conducted by several municipalities have noted typical comments such as lack of space, odor problems, and lack of time as the top concerns regarding implementation of a household organics collection program. For example, a 2008 study in King County, WA, showed that much of public opinion regarding separation of household organics is based on perception rather than reality, and that the “ick factor” dispels when citizens begin recycling household organics.

Current experience also suggests that a municipality must have a strong outreach effort to educate the general public on household waste management practices and illustrate the link between recycling food scraps and lowering refuse collection costs. Information must be easy to understand and the composting process must be as simple and quick for residents as possible. Innovative outreach efforts include composting workshops, illustrated posters of compostable

materials, and images of food waste or recyclables displayed on the sides of collection trucks].

Currently, single-family residential collection of organics is just in its infancy in the United States. Those communities who are “early adopters” have been faced with a series of implementation decisions such as the type of containers, which will encourage a greater participation, and the frequency of collection. Currently, a major trend in residential collection of organics in the United States is providing a variety of kitchen container to help store organics as a means to assist in the daily collection of food scraps and to increase overall participation, as well as some type of external container that will be for curbside pickup.

Collection of household organics is relatively simple and is performed either by the municipality or a waste collection service subcontracted by the municipality. Household organics are placed in a “third cart” and collected weekly or biweekly at the curb. The organics carts range in size from 18 gallons to 65 gallons, depending on whether the municipality allows commingling of yard waste in the carts. Some municipalities that implement the third cart system are able to realize waste collection cost savings by reducing the amount of refuse collections (moving to biweekly or monthly collections).

A majority of communities that offer organics collection have expanded upon an active yard waste collection program by adding such things as food scrap and soiled paper products. This enables “piggybacking” on existing routes and containers, as well as automated collection vehicles or split body collection trucks. Further, by co-collecting yard wastes and food waste together can help mitigate odor and moisture issues.

Lastly, the types of materials collected and ability to accept liner materials to help increase the “cleanliness” of the container depend largely in part on the ability of the composting facility to accept and process these materials. For example, meat, bones, and dairy scraps usually attract animals and also tend to generate odors and attract flies. While keeping these materials out of an organics collection program may cut back on odor and pest problems, many communities have found it extremely complicated for residents to keep food discards separate. This has usually required a significant investment in public education.

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