# Recycling Online

## Going organic in multi-family housing – part 1

*by Roger Guttentag*

The last time I discussed the topic of multi-family recycling (in the August 2014 column, available at tinyurl.com/RO-0814), I summarized some of the major difficulties confronting these programs. Such complications include a transient and often multi-ethnic tenant population, space and cost constraints, and difficulties in measuring effectiveness or tenant participation. On top of all this, in a growing number of areas, local governments are now adding the challenge of implementing organic waste recovery from multi-family buildings.

Why are recycling officials adding to the multi-family complexity? First, in order to achieve lower waste disposal rates, especially for meeting zero waste policy and greenhouse-gas-emission reduction goals, municipalities need to address organic waste recovery in a way that goes beyond yard waste programs.

Second, recent waste composition statistics show that one untapped source of potentially recoverable organic wastes comes from multi-family residential properties. This is shown in the chart below, which indicates the percentage of food scraps and overall organics in the multi-family waste stream in four municipalities (note that each city used a different formula for determining the "total organics" number).

Municipalities are now trying to include multi-family buildings in their organic recovery programs because, put simply, that's where the waste is.

## Getting a general overview

***Solid Waste Association of North America*** – In 2012, SWANA published a report called "Collection of Organic Wastes from High-Rise Buildings," and some of its findings were summarized in a February 2013 article on the SWANA website by Jeremy O'Brien. The article begins by listing some of the key problems that confront organic waste programs in high-rise buildings (which also typically affect most types of multi-family recycling programs) such as limited space for collection containers, inconvenience for residents and the unpleasantness associated with materials that may smell or attract vermin.

The approaches taken by two municipal regions, Toronto and San Jose, Calif. to recover organic wastes from their multi-family residences are then described. Toronto allows multi-family residents to line their kitchen collectors with plastics bags, which are then deposited into central green bins prior to collection. The facility that receives and processes this organic material is able to break open the plastic bags and remove them from the stream.

San Jose, on the other hand, employs a wet/dry collection approach in which organics are commingled with other non-recyclable wastes in a wet stream; recyclables are collected as part of the dry stream. The wet stream is processed to remove non-compostable materials before the remaining balance is sent to an anaerobic digester.

***The Organic Stream***: The Organic Stream, a project of Green White Space (a nonprofit organization that sponsors the development of social impact enterprises), produces a series of podcasts that includes episodes devoted to the topic of organics recycling in multi-family residential buildings. These can be downloaded from the group's website or listened to in a separate browser window. Episodes No. 34 and No. 35 review the different challenges of organics recovery within high-rise buildings through interviews with knowledgeable staff in cities with active multi-family recycling systems, such as New York City and Seattle (information links on these municipalities are provided at the end of this column). Episodes No. 38 and No. 39 focus more on best practices with respect to planning, implementing and sustaining these programs. One of the key takeaways from these segments is the value of regular direct interactions with tenants and building staff, especially when outreach is developed with a deep understanding of tenant demographics such as ethnicity, culture and age.

## Other reports from the field

***City of Cambridge*** – The City of Cambridge in Massachusetts published "Curbside Organics Collection from Residents – Phase 2" in summer 2015, and the report presents the results of a one-year voluntary food scrap collection pilot program. Residential participants were recruited from both single-family and multi-family locations, and the report presents data on both housing demographics. About 12 percent of households participating in this pilot project lived in buildings with four or more units, and the report provides additional participation data on a per-building basis. Gaining participation from this housing demographic was a major priority for the test program, and the report states that much of the door-to-door outreach was devoted to this

| Data Source / Year | Food Waste Only | Total Organics |
|---|---|---|
| Thurston County (Wash.) / 2009 | 19.0 percent | 20.2 percent |
| City of San Diego / 2012-2013 | 20.1 percent | 43.1 percent |
| Orange County (N.C.) / 2010 | 22.5 percent | 39.2 percent |
| City and County of San Francisco / 2006 | 29.9 percent | 43.4 percent |

goal. The analysis also provides other useful operational information such as participant experiences with kitchen collectors and compostable bag liners. Survey and recovery findings are summarized on a per-household basis without being tied to specific housing demographics.

***Global Green USA*** – Global Green is the American affiliate of Green Cross International, an organization founded by former Soviet leader Mikhail Gorbachev to promote a more sustainable global culture. In April 2015, the group published "Measuring the Organics Diversion Improvements from Enhanced Tenant Engagement at Four Multi-Family Dwellings in Albany, CA." The document reports on the food scraps diversion results achieved through the careful application of tenant outreach strategies in select multi-family buildings in California's Alameda County. Key findings include the value of providing food scrap collection containers and bag liners and customizing outreach content to meet the linguistic needs of tenants.

***New York City*** – The "New York City Organics Collection Report 2015" summarizes the work that has been done by the New York City Department of Sanitation (DSNY) in developing and expanding pilot organics collection programs pursuant to Local Law 77, passed in 2013. These pilot projects involve 150 high-rise buildings located in Brooklyn and Manhattan with nearly 16,000 combined households. DSNY plans to expand this high-rise pilot project to another 52 buildings with about 3,500 households. The report discusses how the challenges of this particular housing demographic, as discussed earlier in this column, are being addressed through internal collection approaches and scheduling. The report also discusses program results with respect to recovered quantities and participation along with the role that tenant and building management outreach plays in reaching these results.

## Web Address Directory

| | |
|---|---|
| San Francisco – 2006 Waste Characterization Study | tinyurl.com/SF-Multi1 |
| City Of Cambridge – Curbside Organics Collection From Residents | tinyurl.com/Cam-Multi |
| San Diego Waste Characterization Study – Multi-Family Substream – 2012/2013 | tinyurl.com/SD-Multi |
| Coalition for Resource Recovery – Global Green Food Scrap Recovery Pilot | tinyurl.com/CORR-Multi |
| Collection of Organic Wastes From High-Rise Buildings | tinyurl.com/Forester-Multi |
| NYC Department of Sanitation – Food Scraps and Yard Debris | tinyurl.com/NYC-Multi |
| NYC Organics Collection Report – 2015 | tinyurl.com/NYC-Org12 |
| Orange County (N.C.) Waste Characterization Study – Multi-Family – April 2010 | tinyurl.com/OC-Multi1 |
| Seattle Public Utilities – Food and Yard Waste | tinyurl.com/Sea-Multi |
| The Final Frontier: Best Practices for Organics Recycling in Multi-Story Residential Buildings – The Organic Stream | tinyurl.com/OS-Multi |
| Thurston County (Wash.) Waste Composition Study – 2009 | tinyurl.com/TC-Multi |

## Next month

My review of multi-family organics recovery will continue next month with a survey of programs based in Canada and other non-U.S. regions.

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