

AUGUST 2007

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How to Launch a Food Residuals Composting Program

WHAT'S NEW? BAGGERS AND BLENDERS • ANAEROBIC DIGESTION FOR MSW STREAMS
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PUBLIC-PRIVATE SOLUTIONS

PARTNERSHIPS MOVE COMMERCIAL ORGANICS COLLECTION FORWARD

Cooperation in Cambridge goes long way to reducing hauler service fees, identifying high-volume generators and developing collection efficiencies.

Molly Farrell Tucker

THE CITY of Cambridge, Massachusetts has teamed up with Save That Stuff, Inc., a Boston recycling hauler, to collect food scraps, food-soiled paper, yard trimmings and floral clippings from dozens of businesses and

institutions and take the feedstocks to a local farm for composting. The idea was developed by Randi Mail, Recycling Director for the City of Cambridge Public Works Department, and Adam Mitchell, a partner in Save That Stuff.

“Adam and I had been trying to figure out how to begin collecting food scraps from schools for composting,” says Mail. “The schools were not large enough generators to justify a hauler servicing just them.” Adds Mitchell: “We wanted to add the organics service for a while. A lot of restaurants are our clients for recycling and it was natural to add food waste for those customers. But we were reluctant to make an investment in a collection vehicle without an adequate market in order to build a critical mass of clients.”

Founded in 1990, Save That Stuff originally focused on collecting corrugated cardboard — then expanded to collecting commingled bottles and cans, mixed paper, newspaper, scrap metal, electronics and organics, now serving more than 1,500 customers in Greater Boston. The firm has served as the Cambridge hauler for small to medium-sized businesses for three

years and has had the contract to collect cardboard from Cambridge schools and city buildings for five years. Last year, the company received the Business Recycler of the Year Award from the state’s Recycling Coalition and this year’s Green Business Award from the City of Boston.



Save That Stuff uses a 25-yard packer truck with an on-board scale to collect organics from restaurants, grocery stores and cafeterias. Material is composted (above) at Rocky Hill Farm.

In fiscal year 2006, the City of Cambridge was awarded a \$35,000 Technical Assistance Grant from the Massachusetts Department of Environmental Protection (MADEP) to work with Save That Stuff to offer organics collection to businesses and institutions. Cambridge city officials issued a Request for Bids for marketing, recruiting and training businesses for the organics collection program. The \$30,000 bid was awarded to John Connolly and Asso-

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ciates, a management consulting firm based in Hampton, New Hampshire that specializes in diversion of organic wastes to composting.

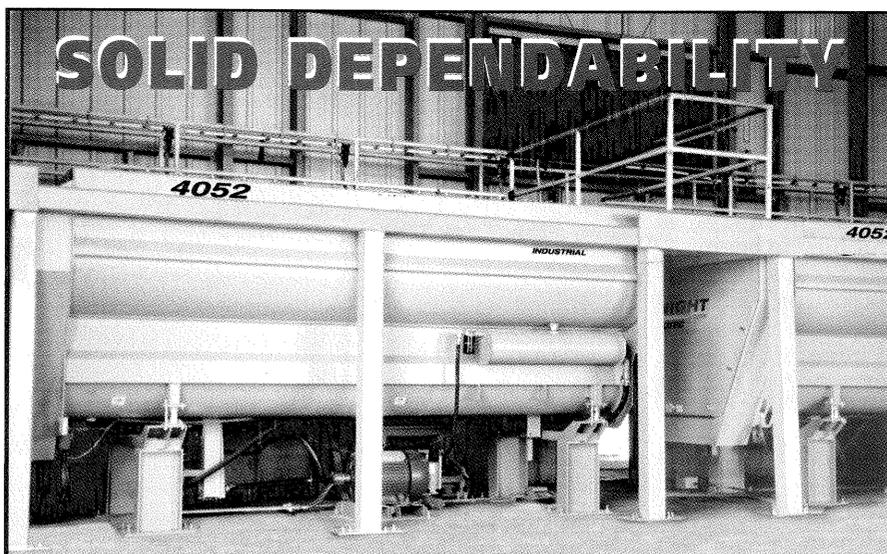
To determine which businesses and institutions to approach, the Cambridge Department of Public Works obtained a list from the City's License Commission of all the businesses in the city with food licenses. Mail, Mitchell and Connolly sorted the food licensees into three categories: high, medium or low generators of organics. They identified 108 high generators including universities, supermarkets, hotels, laboratories and industrial food processors. Another 117 were identified as medium generators, including cafeterias, assisted living facilities, corporations, large restaurants and hospitals. The 520 low generators included bars, florists, coffee shops, and schools.

Cambridge's Public Works Commissioner, Lisa Peterson, sent a letter to 225 of these food waste generators to introduce the organics collection program, as well as John Connolly and Associates, and to invite the generators to participate. "It was really helpful to have the letter from the Commissioner sent out ahead of time to the businesses because when John Connolly went to talk to them, they remembered the letter and knew that it was a city-sponsored program," notes Mail. Peterson also sent letters to the Department of Public Works' 60 commercial trash customers informing them that their trash fees would be rising and offering them a discount if they participated in recycling and/or composting programs. A number of Cambridge city departments got involved in the project including Community Development, Economic Development, Inspectional Services, Health Department, City Council and City Manager's office, as well as other divisions within the Department of Public Works including Sanitation, Sewer Division and Commissioners.

PURCHASING CARTS AND TRUCK

Save That Stuff purchased over 300 68-gallon Otto carts to distribute to its new organics customers at a cost of \$16,774. "Most of the trash containers the businesses use are 95 gallons, so having a 68 gallon container for compost was helpful to differentiate the organics," says Mitchell. The company designed a three-color label that is stamped onto the cart's lid to distinguish it further from trash containers. The label includes the words 'Compost Only' and has a picture of produce. Carts are rented to customers for \$3/month each.

The biggest expense in launching the program was purchase of a new, 25-yard McNeilus packer truck for \$210,000 to collect the organics. The truck has an on-board scale to weigh each customer's carts. The company considered buying a rendering truck or front loader, but decid-



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ed on the packer. "We knew that we had some loading dock stops that would work better with a packer, and we also wanted to be able to see what goes into the truck," Mitchell explains. "A rendering truck has a closed body like a big bathtub and the organics carts would be dumped over the top of it. The driver wouldn't know what was going into the truck until he got to the compost facility." Save That Stuff also wanted to make sure that it had backup vehicles in case the organics truck had problems. "We already had six other packer trucks with cart tipplers we could use as backups," he adds.

Approximately \$5,000 of the MADEP grant funds were used to design and produce publicity materials, including brochures for businesses, bilingual posters for training (in English and Spanish), posters for tabling events, decals for the sides of the new packer truck and a hot stamp for the collection carts. Save That Stuff contributes additional funds to design and print the leave-behind brochures. One outreach initiative involved the City taking a booth at the Cambridge Chamber of Commerce's 2006 Taste of Cambridge event last summer, where more than 50 local restaurants had booths. "Adam and John went around and talked to all the restaurants," says Mail. The Chamber also helped get information out to its members about the organics program through emails and newsletters.

Overall, more than 260 generators were contacted during July and August 2006, either in person, by telephone or email. The focus was on supermarkets and larger hotels and restaurants that could generate large quantities of organic materials. "John qualified the leads and I sealed the deals," notes Mitchell. "I would ask the client for details of their trash contracts in order to determine how to make it cost neutral for them, if not save them money." Adds Mail: "Overall we had a really great response. Some generators were so eager to begin diverting organics that we were concerned that starting in September would be too long a lag time between our initial contact in July and August." Connolly maintained contact with the businesses via email and phone calls during the interim period to keep them interested until the program started.

Rocky Hill Farm in Saugus, Massachusetts was selected by Save That Stuff, Inc. as the compost facility. "We had a preexisting relationship with them, bringing in compactor loads of organics from supermarkets," explains Mitchell. The farm is located ten miles north of Boston and about 20 minutes from Save That Stuff's offices. It has been composting food residuals since the 1980s and 16 of the farm's 40 acres are permitted for composting. The farm also composts leaves, grass, brush and stumps in addition to food residuals. (See "On-Farm

The collection fee is \$100/ton with a 400 pound minimum, or \$20/pick up.

Composting of Boston Area Food Scraps," February 2007.)

RUNNING THE ROUTE

Collection began in September 2006. Save That Stuff set its fee at \$100/ton with a 400-pound minimum, or \$20/pickup. Organics carts at larger generators are serviced five to six days a week, and from smaller restaurants and coffee shops at least once a week.

All types of food scraps can be put in the organics carts, including kitchen trimmings, plate scrapings, coffee grounds and

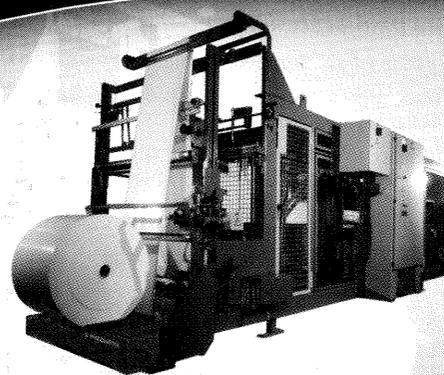
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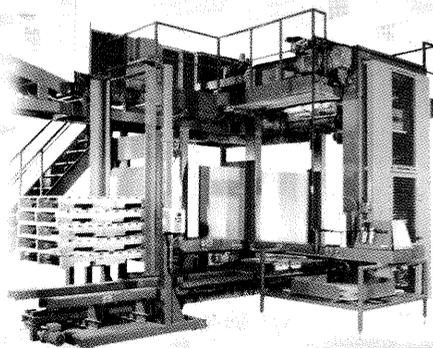
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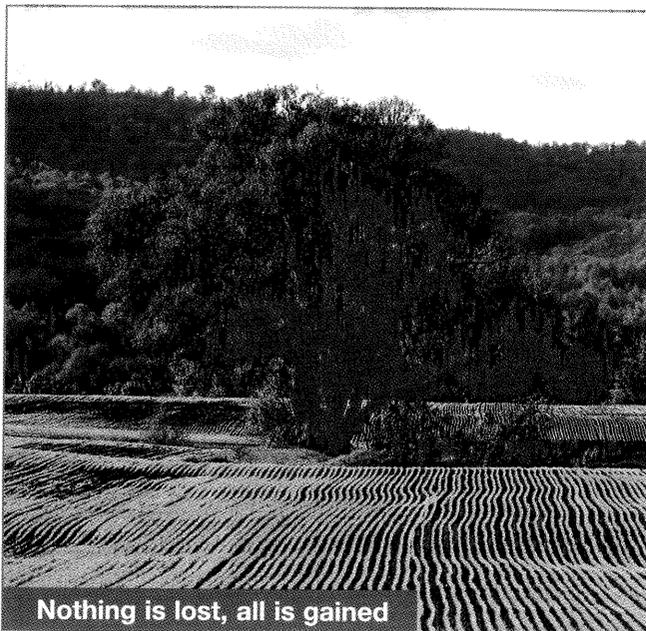
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REQUEST FOR EXPRESSIONS OF INTEREST

The Broward County Solid Waste Disposal District (District) is currently seeking Expressions of Interest (EOI) related to the

future solid waste processing and disposal needs for the District's estimated 1.4 million tons of municipal solid waste produced annually.

Through the use of this Request for Expressions of Interest (RFEI), the District will identify respondents that can meet all, or a portion of, the District's future processing and disposal requirements, consistent with its long-term objectives.

Each respondent shall submit an EOI that details how the respondent will meet all, or a portion of, the District's processing and disposal needs.

The deadline for EOI submittal is October 8, 2007 at 2:00 p.m. Eastern Standard Time. Failure to submit a response to this RFEI will preclude participation in any future District waste management procurement.

To download the RFEI document, along with corresponding background information, please visit the following website:
www.broward.org/resource/recovery/documents.htm

For further information regarding the RFEI, please contact: Sanford Gutner at sgutner@pirnie.com or call (954) 761-3460



filters, tea bags, cooked meat, bones, fish, dairy products and baked goods. Food-soiled papers including paper cups and plates, placemats and milk cartons also are accepted, as well as waxed cardboard boxes, sawdust, yard trimmings and floral clippings. Glass, plastic, Styrofoam, metal, liquids, grease, and other nonbiodegradable items are not accepted. Save That Stuff trains new customers on how to separate organics. "We mostly train the trainers at the businesses and institutions," says Mitchell. "I've done everything from meeting with the servers, training the kitchen staff and meeting with the executive chef or food service coordinator at large institutions."

Save That Stuff's driver starts collecting organics at 5 a.m. along a 100-mile route. Customers put out the organics carts for collection in the same area where they place their trash containers. Save That Stuff provides early morning service or call-ahead service for customers who place the carts at the curb, in order to minimize curbside setout time.

Before starting the program, Save That Stuff looked into compostable bag options. "We are currently discouraging clients from using biodegradable liners in their 68-gallon carts because of the higher price of those liners," says Mitchell. "Our customers are using clear plastic bags as liners so that the carts are not saturated with liquids. The customer is responsible for keeping the carts clean and there is less labor involved in cleaning them when the carts are lined." The plastic bag is held in place with a large rubber band, and remains attached to the cart when its contents are emptied into the truck. "The client is responsible for determining whether or not to change out a bag or use it again," he says, adding that a few customers are using biodegradable liners in smaller, 23-gallon Slim Jim containers inside their stores.

On hot summer days, the packer truck makes more runs to the compost facility. "The material turns to liquid more rapidly, which means we have to get it to the compost facility more quickly, so we collect the food waste in three loads instead of one," says Mitchell.

An average of 12 tons is collected each day, six days a week. The daily tonnage ranges from nine to 18 tons/day depending on the day. "Collecting 20 tons/day is our goal," he notes. By mid-June 2007, more than 1,600 tons of food residuals had been collected since the program started in September 2006.

One problem Save That Stuff has faced is finding a backup compost facility. "Rocky Hill has been really good with us, but in the summer the facility is closed on Saturday, and we run our route six days a week," says Mitchell. "We have to travel to a farm in New Hampshire to unload the truck on Saturday, which takes another 45 minutes each way."

Currently, Save That Stuff has 27 organics customers in Cambridge and 20 in nearby Boston and Newton, Massachusetts. "It's a nice mixture of restaurants, hotels supermarkets, universities, coffee shops, landscape businesses, flower shops, laboratories, and the Museum of Science," notes Mail. In addition, Save That Stuff collects organics from parts of the Harvard campus (in Cambridge), including cafeterias at the Harvard Business School, and has a pilot organics collection program at the largest cafeteria on the Boston College campus this summer. "We'll have the staff trained when the students come back in the fall," notes Mitchell. Save That Stuff is also meeting with the food service director at Boston University and hopes to collect organics from the three largest cafeterias on that campus.

Participating businesses are recommending the program to their fellow businesses. The Oleana Restaurant and 1369 Coffee House in Inman Square in Cambridge have talked up the organics program during business association meetings. "They've gotten a couple of other restaurants to participate and I know that others will begin soon," says Mail.

**BENEFITS –
BOTH EXPECTED AND UNEXPECTED**

Some of Save That Stuff's organics customers are now saving money on their trash bills by participating in the program. "Separating out food waste removes heavy material from the trash, and doing this will reduce the customer's trash bill if it is based on weight," explains Mail. "If the trash bill is based on volume or the number of pulls, businesses can reduce the size of their dumpster or reduce the number of pulls." Some supermarkets that were having their compactors pulled two times a week are now needing them pulled only every two months, says Mitchell.

"Since Whole Foods at Prospect Street started composting in early 2006, the store has saved \$30,924 from the difference in pricing for trash and compost collection," says Mail. "Their trash was collected three to five days a week, and it is now being collected once a month or every two months." She adds that Kabloom, a flower shop chain, is saving \$25 a month at its participating store. "It's a small amount for a small shop but it's something to point to."

Mitchell says that customers can save some money if they have a good deal with their trash hauler and up to 20 percent if they don't have a good deal. "We charge by weight for the organics and most customers are charged by the cubic yard for

trash removal. They need to talk to their trash company to get their trash rates reduced once the organics are removed."

Restaurants that previously weren't recycling before signing up for the organics program are now having Save That Stuff collect their recyclables including cardboard, bottles, and cans. "We've also been talking with clients about making products substitutions such as switching from plastic coffee stirrers to wooden ones," he explains. "Our restaurant clients look at what is left in their trash after the organics and recycling are taken away, and it's usually just some plastic film scrap, bathroom trash and Styrofoam." Getting recycling clients through the organics program helps the company subsidize the organics collection service. "It's brought the concept of zero waste closer to our company and our customers," says Mitchell.

Some restaurants are taking even bigger steps to reduce waste. "Charlie's Kitchen in Harvard Square is now going back to suppliers and saying they don't need packaging if it can't be recycled," notes Mail. "They're using vegetable oil to fuel a 1984 Mercedes station wagon and a 2004 Freightliner sprinter van and are looking to use it to heat their restaurant."

The organics program has also helped control a real nuisance for restaurants. "Cambridge had been dealing with rodent

Getting recycling clients through the organics program helps Save That Stuff subsidize the organics collection service.

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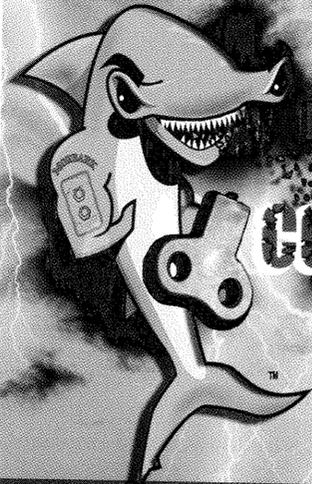


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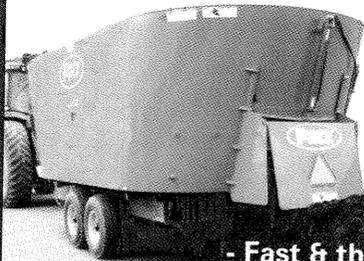
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Composting organics reduces the strain on Cambridge's sewer system. Restaurants using garbage disposals and not properly cleaning their grease traps contribute to clogged pipes (right).



problems, and composting is one strategy for rodent control," she adds. "Separating organics and putting them in tighter containers help reduce the source of food for rodents. While promoting the organics program, we are also promoting having restaurants clean up their trash areas."

Composting organics also is reducing the strain on the city's sewer system. "When restaurants are using garbage disposals and are not cleaning their grease traps properly, the sewer pipes underground can get blocked and eventually need to be excavated," says Mail. "It's really expensive to have to dig into the street and excavate the clogged pipes, and the City charges the restaurants for the costs. Restaurants will also save on their water bills if they are having their food scraps composted and using their garbage disposals less."

With its plan to increase organics collection to 20 tons a day, Save That Stuff is investigating other composting facility options. "Rocky Hill received technical assistance from MADEP which increased the efficiency of its processing systems, but there is certainly a limit to what it can handle," says Mitchell. "The lack of composting capacity in the area was something that we knew about going in and it hasn't hindered us, but it would make us more profitable if there was more competition in composting facilities." The company worked with MADEP to explore whether a municipality with an existing leaf and yard waste composting facility could compost some of the organics. "It didn't have enough volume and labor to process what we would bring in," he says. "Two other municipalities have expressed interest in composting the organics and we've also talked to some small farms in the area about partnerships but nothing has flushed out yet."

Mail says the City of Cambridge is investigating anaerobic digestion and the possibilities it could offer for organics collection to residents. It also is considering making participation in the organics program mandatory for large generators. "This will continue to be explored as an option, particularly in anticipation of plans by MADEP to possibly ban food waste from landfills in 2010," she notes.

The City of Cambridge doesn't have any ongoing costs for the organics program and Mail thinks a similar program could be started elsewhere without grant funding. "Part of our intention was to create a replicable project for other communities and haulers," she says. "The promotional materials are owned by MADEP, and may be used upon request for communities that want to start an organics collection program. The next community can have a successful project, as long as there is a true partnership between the city and the hauler, which we have with Save That Stuff. The customer knows that composting is the right thing to do and if the hauler commits to reasonable pricing, you're able to tell customers that the cost will be the same or less than they are paying for trash collection."