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How to Launch a Food Residuals Composting Program

WHAT'S NEW? BAGGERS AND BLENDERS ANAEROBIC DIGESTION FOR MSW STREAMS
BIOENERGY AND SOIL CARBON SEQUESTRATION HAULER "ROUTES OUT" THE HEAVY ORGANICS

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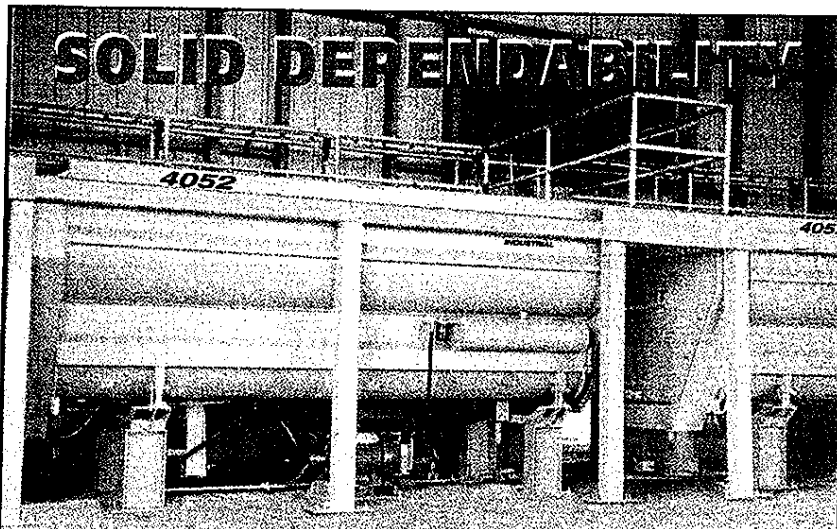
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ciates, a management consulting firm based in Hampton, New Hampshire that specializes in diversion of organic wastes to composting.

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-

**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.

Want To Make Some Serious Money?



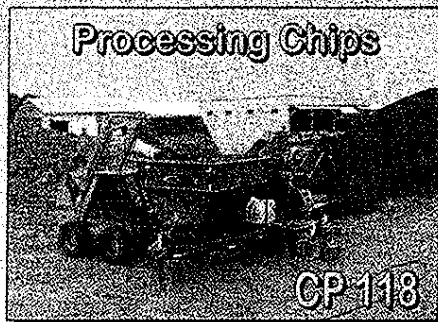
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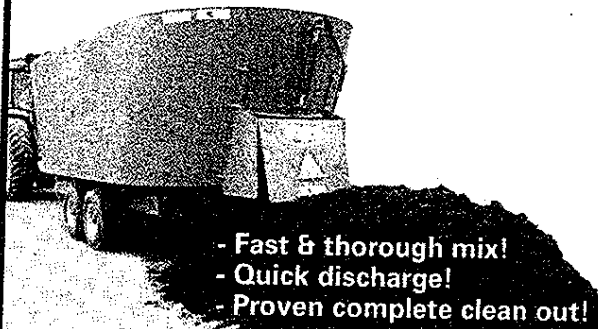


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Composting organics reduces the strain on Cambridge's sewer system. Restaurants using garbage disposals and not properly cleaning their grease traps contribute to clogged pipes (right).



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."