

Maryland firm aims to turn food waste into green business

November 26 2012, by Timothy B. Wheeler

Many people see Thanksgiving leftovers as too much of a good thing and toss them out. Vinnie Bevivino wants those uneaten castoffs and more - he sees a chance to make some green with them while going green.

Bevivino, 31, is the owner of Chesapeake Compost Works, the Baltimore area's latest addition to Maryland's fledgling food recycling industry. His startup began processing scraps and spoilage from local restaurants, supermarkets and institutions about a month ago in a cavernous old warehouse.

Early next year, if all goes as planned, he hopes to begin selling that unwanted food waste after it's been transformed into dark, rich humus, which the region's gardeners and urban farmers can use to make new food.

"This is a drop in the bucket," Bevivino said, surveying the long, steaming heaps of composting food scraps, mixed with large doses of wood chips, which stretch across the concrete warehouse floor. "There's huge potential."

Indeed, castoff food is the largest single component of the waste put in landfills and burned in trash incinerators, according to the <u>Environmental Protection Agency</u>. More than 34 million tons of food got tossed nationwide in 2010 alone, the EPA estimates, with only 3 percent of that diverted for composting.



Recycling that food waste instead of burning or burying it can save money, advocates say, and converting it to compost can help grow new food by enhancing depleted soils. Keeping food out of <u>landfills</u> also helps fight global warming, proponents say, because the methane given off by rotting organic matter is 21 times more potent than carbon dioxide in altering the earth's climate.

Yet composting has been slow to take off in Maryland - which proponents attribute in part to regulators' ambivalence in the wake of problems with odors and runoff from a few early operations.

A composting business in Carroll County, Md., Recycled Green, stopped taking food waste about a year ago after the state Department of the Environment decided there was a risk of nutrient-rich organic liquid leaching from its outdoor piles and required the company to get a discharge permit.

Mike Toole, Recycled Green's business development manager, said the company still composts natural wood waste, but the food waste it once processed is now being put in a landfill or shipped out of state. Much of it goes to a large-scale food composting operation in Delaware.

"It's been more than a little frustrating," Toole said.

For Bevivino and Adam Schwartz, his lone employee to date, the composting venture offers a chance to make a living by following their ideals.

"We're both kind of suburban kids who grew up interested in ways to improve the world," explained Bevivino, who grew up in the Philadelphia suburbs and got a degree in environmental science at the University of Maryland, College Park. Schwartz, 27, grew up in Montgomery County, Md., and studied climate policy at the university.



The two met while working at ECO City Farms, a nonprofit farm inside Washington's Beltway in Prince George's County. There, Bevivino said, he came to realize that soil and soil fertility were "the missing link in our food system."

With a little financial help from family, friends and private investors, Bevivino launched Chesapeake Compost Works as a business devoted to the "triple bottom line" of improving society and the environment while also seeking profits.

Since mid-October, the company has been taking food waste from selected commercial trash haulers.

One day last week, clad in rubber overalls and elbow-length gloves, Bevivino sliced open plastic bags of food debris delivered earlier in the morning, spilling out overripe melons, bruised apples and other sometimes unrecognizable remnants of fruits and vegetables. He paused periodically to spray water on the smelly, already damp pile, explaining that moisture provides a medium for the bacteria that drive decomposition of the food.

Then Schwartz, jockeying a skid loader around the warehouse, mixed in scoop after scoop of wood chips. Once thoroughly combined, the pile was added to the end of a long, steaming heap of composting food already stretching across the concrete floor.

Wood chips are an essential ingredient, Bevivino explained, providing bulk and helping to aerate the pile to improve decomposition of the organic matter. Proper composting requires a mixture of about three parts of wood chips for every part of food or organic matter, he said.

Chesapeake Compost Works gets wood chips from a tree-trimming contractor for Baltimore Gas and Electric Co., and from the city



Department of Recreation and Parks, but Bevivino is looking for new sources as production expands.

"People don't realize this is cost-competitive to landfilling," he said. "I love the idea this is happening not just because it's the right thing to do. It's the smart and economical thing."

Though still two or three months from having a marketable product to sell, Chesapeake Compost Works is already winning plaudits from some businesses interested in recycling their food waste.

"This is one of the most exciting things to come down the pike in a long time," said Spike Gjerdes, chef and co-owner of Woodberry Kitchen, a farm-to-table restaurant in Baltimore. Being able to compost food waste helps complete the connection with local growers, Gjerde said during a recent open house for Bevivino's business.

Del. Heather Mizeur, a Montgomery County Democrat, got legislation passed directing the state agriculture and environment departments to study how best to promote and regulate composting. A report is due by the end of the year.

"We've gotten really good at recycling and there's been a lot of effort focused around that," Mizeur said. "But we haven't gotten to the point where everyone composts by second nature. ... There was such a hodgepodge of rules and regulations in multiple agencies that overlapped or didn't talk to each other and were disconnected in ways that were a disincentive for a company like Chesapeake Compost Works."

Bevivino, meanwhile, is forging ahead while consulting closely with regulators to avoid any trouble.

The 54,000 square feet of warehouse space he's rented enables him to



avoid the runoff concerns of an outdoor operation. Food waste will decompose for about a month indoors atop a network of pipes that are designed to draw air through the piles, helping decomposition while capturing odors that might otherwise upset neighbors. The material will then spend another two months finishing the compost process outdoors, also under cover from rain.

He's processing five to eight tons of food waste daily, and once production ramps up he hopes to handle 60 cubic yards a day of compost for sale.

While Bevivino said he'll take food-scrap dropoffs from households during business hours, the only other residential composting, outside of do-it-yourself backyard operations, is in Howard County, Md.

The county is collecting food scraps from about 300 households in a pilot program and plans to slowly expand that. For now, those pickups are being trucked to Delaware to compost, but the county is building its own composting plant at the Alpha Ridge landfill, which should be open next year, said Joshua Feldmark, the county's environmental sustainability director.

The only other commercial <u>food-waste</u> composter in the Baltimore area is Veteran Compost in Aberdeen, Md., a 2-year-old company that picks up scraps from a few local sites and sells completed compost by the bag (\$5 per 20 pounds) or in bulk (\$35 a yard). Owner Justin Garrity said he has four employees and is looking to expand, with a preference for hiring military veterans.

"I'm happy to see Vinnie's up and running," Garrity said "There's huge demand in this state."

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