

Waste Not

Composting for Restaurants and Food Processors

by Keith Waller



Most of the weight and up to 35 percent of the volume of waste heading to overloaded landfills is food waste and related packaging. The organic matter, when left in landfills, generates methane as it breaks down, and this leaking methane is an extremely powerful greenhouse gas.

Tony Atkins, owner of Live Refresh in Columbia, has an Earth-friendly solution. “While in California looking at alternative energy business ideas, I noticed that in restaurants people put leftover food waste and scraps in a separate container,” Atkins shares. “I needed a higher purpose, something that would have an impact on the community.” That higher purpose idea was to scale industrial-sized composting to an affordable system that would take a tremendous part of the waste stream back to a natural, clean and safe process, saving energy and money along the way.

Using “right-sized” tumbling composters that inject air into the mixture of food waste, compostable food packaging and wood waste, Live Refresh equipment can change up to 300 pounds of raw food scraps per day into finished compost in less than seven days. It’s odor free, insect free and rodent free, so it can be a sanitary improvement where food waste is a problem. A compost heap left naturally would take many months to break down, and without being periodically turned, would still generate heat and methane. The resulting product from the Live Refresh system is a valuable compost material with many uses.

“We haven’t sold compost yet,”

Atkins says. “We thought it would be just used for raised gardens and golf courses, but it turns out that the highway department also uses compost for erosion control. The composting units are put into operation at the customer’s site, and the resulting compost belongs to the customers, so we don’t collect or sell the compost material. We’re looking at a central collection system as well for smaller customers, and in that case, we would have compost material to market.”

For Atkins and Live Refresh, green thinking is a mission. “I have a policy to never buy a car that gets less than 40 miles per gallon.” Atkins drives a Prius, and the company fleet is made up of diesel and gasoline cars that get no less than 43 miles per gallon. The office harvests rainwater for landscape irrigation, and they have their own raised gardens to tend.

Restaurants also deal with a lot of paper and plastic tableware and carryout material that gets mixed in with food waste. The solution is covered by Earth Rich, another SC company partnering with Live Refresh. Its trays, bowls, cups, plates, even trash bags and leaf bags are biodegradable and go right into the composter with food, breaking down in the same five to seven days.

“Our products are made from renewable resources, mostly sugarcane fibers,” says Lily He, executive product manager. “We can customize anything for restaurant tableware.”

“Our product looks like heavy duty rigid paper,” He explains. “You can see the natural fibers in the material, and they come in a bleached

material or natural unbleached — very sturdy. We did test comparisons between our product and Styrofoam and plastic, and ours performed better, and can still handle hot soups and the microwave.

Plastic and Styrofoam do not biodegrade into soil, but instead, accumulate in landfills and appear in the oceans, beaches and roadsides, lasting for many years. What about the corn-based plastics that can biodegrade and look just like regular plastic? According to He, “biodegradable plastics, the corn-based PLA [polylactic acid] material, eventually biodegrade in soil, but can only be used for cold food and drinks, never hot.”

Are the Earth Rich tableware products manufactured locally? “Right now, they come from China, but the owner’s dream is to find the means to manufacture here,” He says. “The market right now is on the West Coast and up North, but Earth Rich intends to be based in the Southeast and is headquartered in Greenville, SC.

“We’ve begun making compostable leaf and trash bags, but we are also looking into clothing, like T-shirts, and also into biodegradable toys, like one-time play toys and beach toys,” says He. “Things like a child’s sand pail and other toys that can be lost on the beach or the ocean—that can disappear with nature.”

For more info on Live Refresh and commercial-scale composting, call Tony Atkins at 803-381-7303 and visit LiveRefresh.com. For more info on biodegradable tableware for food service, call Lily He at Earth Rich, 864-331-4530, and visit EarthRichLLC.com.