



EnviroPure: a 21st Century Solution to An Age-Old Problem

As sustainability becomes an increasingly critical concern for society, facilities that deal with high volumes of food waste are being forced to reevaluate their traditional disposal practices. Hauling waste to a landfill, long the go-to option for most of us, has fallen into disfavor as statistics about methane and its sundry hazards have spread. And, as municipalities have discovered the evils of enzymes and FOGs and nonorganic additives, they've tightened up regulations on what can go down your drain. Growing "zero food waste" policies are forcing grocery stores, restaurants, hospitals, universities, prisons and other facilities to find alternative ways of dealing with a problem that's not going away any time soon.

One of the most promising solutions is coming from a surprising source. In 2013, T&S Brass and Bronze Works, the commercial foodservice and plumbing product manufacturer that invented the pre-rinse spray unit and the foot pedal valve, bought a Chicago-based, eco-tech company called EnviroPure and moved it to their headquarters in Upstate South Carolina. Today, EnviroPure systems, which turn food waste into water in 24 hours or less, are showing up everywhere from Chicago's Shedd Aquarium to the Statue of Liberty.

"T&S has always been a leader in environmental initiatives," says Director of Marketing Eva Marie Fox. "Not only do we have a history of developing conservation-minded products, we incorporate eco-friendly processes in our manufacturing facilities." When the company went looking for growth opportunities, EnviroPure seemed a good fit. "T&S foodservice products are well known and well respected," says Fox. "EnviroPure is simply an extension of what foodservice folk have come to expect from us: a product that gets the job done reliably, effectively and efficiently."

EnviroPure is an easy-to-operate organic food waste disposal system that, through a combination of mechanical processing and aerobic decomposition, breaks down food waste in just 24 hours. The end result is a safe, gray water byproduct that meets—and often surpasses—municipal wastewater requirements, or a dry compost that is generated onsite and can be used immediately for landscaping. Using a 100% natural micro nutrient additive and a minimal amount of water and energy, EnviroPure eliminates food waste as well as negative aspects typically associated with it: trucks on the road, emissions in the air, intrusive odors and pests in your building, and a carbon footprint much bigger than anyone wants.

The newest version of EnviroPure incorporates an ozone generator that allows the water naturally extracted from food waste to be reused in the grinding process, dramatically reducing the already minimal amount of water the system uses during the food waste digestion process. From the output of the filter box, the grey water enters an ozone bubbler tank. (See diagram.) The water travels through a series of baffles, where a small amount of ozone is injected into the tank via a small generator. The water in the tank is then recirculated in the ozone tank until needed for grinding or some other purpose. Any excess water will be discharged from the top of the ozone tank and reused as necessary.

While there are a number of other options available as solutions to food waste disposal, virtually all have negative features. Industrial composting, for example, is expensive, available only on a limited basis, and any improvements in diversion rates are negated by the continued need to keep trucks on the road for relocating waste and compost. Dehydrators use a huge amount of energy, require a process time of 12-16 hours per batch, and often emit unpleasant odors. And anaerobic digesters depend on nonorganic additives that will almost inevitably clog sewer lines.

Besides its many environmental benefits, EnviroPure systems also offer significant savings over traditional waste disposal costs. With no hauling costs, tipping fees or fuel surcharges to pay, it's not uncommon for a commercial or institutional kitchen to save tens of thousands of dollars annually, with an average ROI of only 2-3 years. The operational improvement offered by EnviroPure are also significant—from a more streamlined workflow to a safer, more pleasant environment.

Every EnviroPure system is custom built to suit its particular situation—from cramped, urban walk-ups to sprawling entertainment meccas such as theme parks or casinos. “We can generally get a system installed in a day,” says EnviroPure president and creator Jim Slanina, “but we spend a couple of weeks determining the configuration that’s going to work best for your efficiency and convenience. A corporate cafeteria is going to have a completely different floor plan from a hospital, and a grocery store kitchen operates nothing like a university’s. We build systems that can handle from 150 to more than 14,000 pounds of waste, and we assemble it to suit you, not us. If you need the food chute in the kitchen and the grinder in the basement—or even outside, that’s not a problem.”

EnviroPure’s computerized operating system provides 24/7 technical support as well as readily accessible reports on carbon footprint and other sustainability measurements that are increasingly important in this sustainability-centric environment.

More information on EnviroPure is available at www.EnviroPureSystems.com.