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**REPORT**  
SUMMER 2011

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to gold at  
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**THE ROCKET®**

# Resource Center



## Turning garbage to gold at “Rocket” speed Food waste composting program launched in Chatham Township

By **Julie Lange Groth**, ANJEC Report Editor

*Take a bucket of garbage. Add a bucket of wood chips. Pour it into a sleek, cylindrical metal contraption and wait two weeks. Out comes dark, rich organic compost that's ready to add life to the garden, green to the grass and vitality to the school curriculum.*

That's the formula being applied in the School District of the Chathams since the inauguration of *The Rocket*® Composter, a surprisingly simple food waste recycling system that began eating kitchen scraps and lunch leavings on Thursday, May 19. It is the first *Rocket* to be installed in New Jersey and the first to operate in a public school in the entire US.

With the ability to process 180 gallons of waste per week with minimal human effort, the composter is expected to produce enough compost to save up to \$6,000 in mulching and landscape fees for the school system each year.

Unlike most backyard composters that can take months to fully break down food waste, *The Rocket* is fast. After food waste is poured into one end of the 9.8-foot cylinder, a wooden paddle that runs the length of the tank automatically makes two rotations every 45 minutes, slowly pushing the contents inside the heated composter toward the opposite end, where it emerges after 14 days as crumbly, black compost.

The ability to process meat

and dairy products sets *The Rocket* apart from other composters that only accommodate vegetative waste. While the outside of the tank remains cool to the touch, the internal temperature reaches up to 158 degrees Fahrenheit, speeding the decomposition process and killing any pathogens in the food.



Chatham High School Principal Darren Groh and Earth Science Teacher Missy Holzer demonstrate how to separate lunchtime waste so that food scraps go into the Brute barrel for composting. Photo by Peter Craig

Present at the launch of the Chatham Township food waste composting system at Chatham High School (CHS) are, from left, Bob McBreen, CHS Food Service Supervisor; Peter A. Marcalus, CEO, Marcalus Management Corp.; Pat Collington, PM, Chatham Township Environmental Commissioner;



John Cataldo, Supervisor of Buildings & Grounds, School District of the Chathams (SDOC); Gerardo Soto, Managing Director, NATH Sustainable Solutions; and Gasper Major, SDOC Maintenance Department Head. Photo by Peter Craig

## Low costs, big rewards

Operating the new composter costs very little. It consumes just 21 kilowatt hours per week to turn the inside paddle. The only maintenance required is applying grease to certain points once a month and rinsing out the filter where fluids drain from the composter on a weekly basis. All of the wood chips will come from municipal and school properties and from vendors that service those properties.

Chatham Township Environmental Commission member Pat Collington, who wrote the successful \$25,000 grant proposal to purchase the composter for the school district and educational materials for Township residents, says she's happy about the way the program has brought together people from the Borough and Township as well as various departments in the joint school district to think about and change the way food waste is handled. "How many projects let you reap the benefits in just two weeks?" she boasts.

Among the greatest benefits of the program is reducing the municipalities' carbon footprint. The Chatham Township Environmental Commission performed one of the State's first municipal greenhouse gas inventories in 2008. The school composting program is one of several

steps the Township has been taking to trim its carbon footprint.

The composter will cut down on greenhouse gases from trucking food waste to landfills as well as the methane emissions from those landfills.

Americans discard enough food waste each day to fill 6,300 garbage trucks, according Gerardo Soto, a representative of NATH Sustainable Solutions, marketers of *The Rocket*. The greenhouse gas reduction from composting that much waste would be equivalent to taking 4.5 million cars off the road.

The food service company that prepares meals for the District's schools already has a program in place to minimize food waste, which it weighs daily. One of the school District's kitchens – located in the high school in Chatham Township – currently produces about 15 quarts of food scraps per day, which, when combined with the wood chips, will yield 50 to 80 gallons of compost every two weeks. This kitchen prepares meals for several of the District's schools and the students in the high school add their lunch scraps too. After the initial implementation phase, all six of the schools in the District will be fully participating in this new school food waste program.

## An educational tool

*The Rocket* is part of a larger educational effort in the Chatham to raise awareness and change behaviors with regard to waste disposal. On the day the composting program was inaugurated, High School Principal Darren Groh was standing behind three large waste containers outside the school cafeteria, guiding students to properly dispose of paper, cans and bottles – and especially lunch leftovers. A big red barrel emblazoned with the moniker “The Brute” was there to accept the food waste.

Earth Science Teacher Missy Holzer says the new composter is “an excellent learning tool for our students.” Curriculum materials are being incorporated throughout the District, including lesson plans with hands-on experiments that kids can do.

Among the possibilities, Holzer said she envisions demonstration plantings with and without compost on school grounds and experiments with putting compostable plates and cutlery into the composter to see

whether they truly biodegrade as advertised and how quickly they break down.

The high school’s environmental club created signs that were posted around the facility and also worked with the school’s TV production department to produce a video public service announcement featuring student “actors” that premiered during the homeroom period. They also posted the video on SchoolTube, a moderated video sharing website used by K-12 schools and endorsed by leading education associations.

Adults in the community are also learning about the benefits of composting. Last year the Township’s Environmental Commission launched their “Save It to Spade It” program, which included a series of free composting workshops for residents. They also offered low cost backyard composters that are now in use throughout the town by residents, schools, Scouts, local Master Gardeners and other organizations. This spring at another free composting workshop, 50 interested Chatham Township residents received free

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**SAVE THE DATE**  
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**Saturday, Oct. 15, 2011 • 9 am to 4 pm**  
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*Featured Speaker*

Robert Martin, Commissioner, New Jersey Department of Environmental Protection

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 Check [www.anjec.org](http://www.anjec.org) for more information coming soon

backyard composters, paid for by the same grant that purchased *The Rocket*.

**Seed money**

Funding for the Chatham Township school food waste composting program came from a grant supplied by Walmart through the Sustainable Jersey Small Grants Program in 2010. A new round of Sustainable Jersey grant funding was announced in early June with an application deadline of July 22, 2011. For more information visit [www.sustainablejersey.com/resources.php](http://www.sustainablejersey.com/resources.php).

The New Jersey Department of Environmental Protection Bureau of Recycling and Planning has developed a recycling demonstration program that provides matching grants of

up to \$20,000 for colleges and universities that want to establish campus food waste



*One day's food scraps from the Chatham High School Cafeteria that will be fed to **The Rocket** along with wood chips to be turned into rich, dark compost.* Photo by Peter Craig

recycling systems. This program is funded through the Recycling Tax established in the *Recycling Enhancement Act*, which includes a provision for funding recycling research and demonstration projects at New Jersey colleges and universities. For more information visit [www.state.nj.us/dep/dshw/recycling/demo%20grant%20program%202011.pdf](http://www.state.nj.us/dep/dshw/recycling/demo%20grant%20program%202011.pdf).

For more information about the Chatham Township On-Site School Food

Composting Program, contact Pat Collington at [ctec@chathamtownship.org](mailto:ctec@chathamtownship.org) or call (973) 635-4600.