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Wheelabrator BRIDGEPORT News

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Save and sustain

Wheelabrator Bridgeport cuts water, electricity usage

By David Liscio

Cutting down on the financial and environmental cost of water usage and electricity is now standard operating procedure at the Wheelabrator Bridgeport waste-to-energy facility.

In fact, if the lights are out in various parts of the plant, it doesn't mean nobody is working. Motion sensors have simply shut down the unnecessary illumination.

According to Edward Gusciora, the facility's environmental health and safety officer, new strategies for achieving sustainability — some of those first adopted at the company's South Broward plant in Florida — are being implemented in Bridgeport.

"There are actually two parts to sustainability," said Gusciora. "Waste Management made a commitment to it and has published newsletters and statements supporting the effort. We are trying to conserve on water and also on electricity."

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Ed Gusciora, environmental health and safety manager, conducted a week-long series of air testing.

Wheelabrator has signed a contract to serve the Bridgeport area for another five years.

Contract renewed

CRRA communities stay with Wheelabrator

By David Liscio

Wheelabrator Bridgeport has signed a new 5½ year service contract with the Connecticut Resources Recovery Authority (CRRA) representing 12 to 18 communities that have been served by the company for the past two decades. The company also forged a separate deal with East Haven, which hires its own haulers.

In in the mid-1980s, the CRRA signed a 20-year contract with Wheelabrator to design, build and finance a waste-to-energy plant to provide waste

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Looking forward to the next 20 years

Vin Langone

Welcome to the winter edition of *Wheelabrator Bridgeport News*.

Last year was an exciting and productive year for us, as we celebrated our 20th anniversary in business. Wheelabrator Technologies designed, built, helped finance, and has operated the Bridgeport plant since 1988, and we were pleased to renew our contract in 2008 with the Connecticut Resources Recovery Authority to continue to provide waste disposal for local communities.

Our plant was also able to increase staffing, adding one more employee to every operational shift. Bridgeport is one of four Wheelabrator plants to implement this pilot program, with the goal to improve the quality of life for employees.

Inside this edition, you will also read about how our plant received the Staying Grounded Award from Groundwork Bridgeport for being an outstanding community partner. We are also working diligently to find new ways to reduce water and electricity usage, and to improve safety procedures - not only at our plant, but throughout the Wheelabrator workforce.

Best wishes for a happy and healthy 2009. As always, thank you for your continued support.

Vin Langone is plant manager at Wheelabrator Bridgeport.

Wheelabrator Bridgeport Quick Facts

The facility utilizes the most advanced air-pollution-control equipment available. This state-of-the-art equipment along with the facility's Continuous Emissions Monitors (CEMs) ensure that we remain in full compliance with all state and federal standards.

2020 vision

Waste Management's O'Donnell highlights company's green initiatives

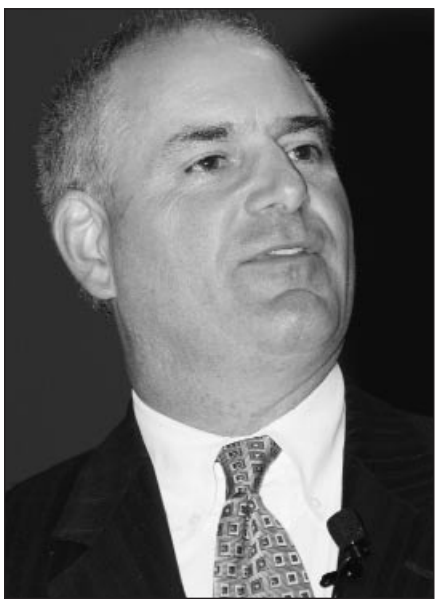
BY DAVID LISCIO

Green may be today's buzzword among the environmentally-conscious, but sustainability isn't a new concept at Waste Management, which for years has been finding ways to use trash as an energy source.

That message provided the bulwark of a keynote address delivered by Waste Management President and Chief Operating Officer Lawrence O'Donnell III at the 20th annual symposium of the Wildlife Habitat Council (WHC), held in Baltimore on Nov. 17-18.

According to O'Donnell, the company's more than 47,000 employees often express a desire to get involved in community efforts to preserve wildlife habitat, conserve open land and generally make the planet healthier.

"In the late 1980s, Waste Management began working with the Wildlife Habitat Council. Our employees were looking to get involved and this organization helped us do that," he said, noting the council has been responsible for ensuring that 2.4 million acres, most of them owned by large U.S. corporations, remain as wildlife habitat, conservation land, or are otherwise part of sustainability projects.



Lawrence O'Donnell III

"We have been thinking about green for a long time. What in the world is a trash company doing talking about sustainability?"

With that rhetorical question, O'Donnell launched into a list of Waste Management's green initiatives, particularly its hallmark program that includes 16 waste-to-energy facilities capable of creating enough steam to push turbines and generate electricity for homes and businesses.

More recently, the company has begun tapping into its landfills to extract and capture methane gas, which can be burned as a fuel source. Its fleet of trucks also has been targeted for fuel-efficiency upgrades.

At some facilities, such as the waste-to-energy plant in Saugus, Mass., landfills laden with ash have been capped and transformed into scenic wildlife habitats, complete with a visitor center and associated education program. In Baltimore, a riverside fish hatchery is operated adjacent to the waste-to-energy facility. Both projects are evidence of the company's environmental commitment.

In 2006, Waste Management recycled enough paper to save more than 41 million trees and generated electricity capable of annually powering more than one million homes. The company's waste-based energy annually replaces the nation's need for more than 14 million barrels of oil. Its landfills, designed with liners to prevent leachate from entering the region's groundwater, provide more than 17,000 acres of protected wildlife habitat.

By 2020, the company expects to double its green energy output, increase the volume of recyclables processed from eight million tons to more than 20 million, and boost the efficiency of its fleet by 15 percent, which simultaneously will reduce emissions. O'Donnell said the company also plans to quadruple the number of acres currently set aside for conservation and wildlife habitat – news met with a roar of approval from WHC members at the Baltimore symposium.

All of these are good talking points for a corporate leader such as O'Donnell, but nothing apparently surprises him more than the latest development, which has positioned Waste Management as a world leader among so-called green corporations, attracting the attention of other big businesses that seek to follow a similar path. O'Donnell credits the WHC for helping to ensure that ranking.

As he put it, WHC's programs can clearly benefit a corporation committed to leading the way in environmental stewardship. Since the start of their collaboration 20 years ago, the WHC has certified more than 25 Waste Management properties, and other sites are now candidates for that distinction.

"We feel like we're making a difference. Companies are actually coming to us," said O'Donnell. "People are starting to look at us differently."

Industry leader

Wheelabrator VP Cole honored by Columbia University for outstanding contributions to waste-to-energy industry

By Sean Leonard

Arthur "Artie" Cole, vice president of technical services for Wheelabrator Technologies, has worked for more than three decades to invent and improve waste-to-energy systems, and his efforts have led to seven U.S. patents for improvements in refuse-combustion techniques and air-pollution control.

Because of his ingenuity, Cole was honored by the Waste-To-Energy Research & Technology (WTERT) Council at Columbia University with its 2008 Outstanding Industry Contributor Award.

"My job is to go around the plants constantly looking at the issues causing problems and determine where we can make improvements and design new systems," said Cole, who works at Wheelabrator's headquarters in Hampton, N.H., and provides his engineering expertise to both Wheelabrator and its parent company, Waste Management. "I've always liked to make things work better."

> "This is a very regulated industry and we provide the purest form of recycling."
>
> **Arthur Cole**

Affectionately known to friends and colleagues as "the pig farmer," a reference to his work as a youth on Boston's North Shore at his family's hog farm, Cole's educational background is centered in animal science and agricultural engineering. Cole attended North Shore Community College after graduating in 1973 from Essex Agricultural and Technical Institute in Danvers, Mass.

"That's where I developed my mechanical aptitude and passion for fixing things," Cole said. "There's a lot of mechanics and engineering involved in agriculture."

A Peabody, Mass., native, Cole recalls working as a youth collecting food waste from swill buckets, something most homeowners at the time had on their property. "We'd collect the swill to feed to the hogs, so I've really worked in waste-to-energy for my entire life," he said.

Cole went to work for Wheelabrator in 1977 as a first class mechanic at the company's first waste-to-energy plant, located in Saugus, Mass. Eleven years later he was promoted to New England regional manager for maintenance. In 1993 he was named director of plant engineering, then vice president of plant engineering in 1998; vice president of maintenance and plant services in 2001; and vice president of technical services in 2007.

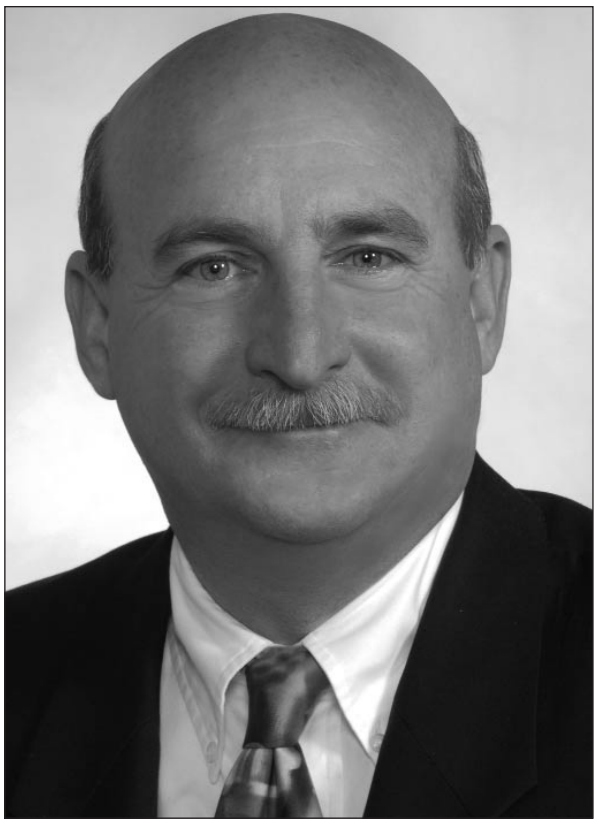
"I'm always traveling, visiting all of the plants," Cole said. "The technology has evolved and we're constantly designing new systems, and improving old patents, to keep up with the technology. This is a very regulated industry and we provide the purest form of recycling."

Among Cole's inventions for which he was honored by WTERT are:

- a slide plate guide that eliminated the need for roller bearings that would quickly wear out;
- expansion joints made from high temperature fiber rope that is placed around ceramic tiles protecting the waste-to-energy combustion chamber;
- shields that protect waste-to-energy boiler tubes from erosion and corrosion;
- a replaceable boiler roof segment that does not require the entire grate to be removed; and
- durable spray nozzles for air-pollution control.

"There's a lot more to these plants than most people imagine," Cole said. "When the public is made aware of that, their comfort level (toward the plants) goes way up."

Nickolas J. Themelis, director of the Earth Engineering Center of Columbia University, said of the 2008 award recipients, "It is a common saying that certain people make all the difference in this world. This is true for the individuals (honored in 2008). Through their life's work, they have contributed much to the global advancement of thermal treatment technologies and the attendant environmental and resource conservation benefits."



Wheelabrator Vice President Arthur Cole was honored by Columbia University.

Wheelabrator celebrates 100 years of business

Wheelabrator Technologies Inc., the U.S. pioneer for municipal waste-to-energy technology, is observing its 100th year of environmental achievement and innovation by looking forward to the next 100 years of continued excellence and leadership.

The company's accomplishments span a century of establishing global standards for design and efficiency in materials handling, industrial foundry and castings, dust control, worker safety, and environmental control.

"On behalf of our 100-year heritage of excellence and innovation, this celebration marks the beginning of an even more exciting future for Wheelabrator," said Mark A. Weidman, president. "We're deeply proud of the inventive, landmark environmental achievements of our predecessors and equally enthusiastic about the potential for even more challenging leadership and innovation in the decades ahead."

Wheelabrator was founded in 1908 as Sand Mixing Machine Company, which, by 1910, had evolved into American Foundry Equipment Company, inventor of the American Dust Arrestor, an industrial fabric cleaning system for foundry operations. In 1932, the company introduced the airless centrifugal wheel for efficiently cleaning industrial surfaces.

Over the next two decades, through acquisitions and innovations, the company grew into an environmentally focused company. By the early 1970s, Wheelabrator emerged as the founder of the U.S.-based waste-to-energy business when it opened the industry's first commercially successful facility in Saugus, Mass.

Today, wholly owned by the largest environmental service company in North America, Waste Management, Inc., Wheelabrator is a recognized market leader in the design, construction, and operation of waste-to-energy and independent power plants, with 21 facilities across North America. The company has recorded numerous industry firsts in providing reliable and safe waste disposal, clean energy, natural resource management and protection, and air quality control.

Notable Wheelabrator "firsts" include:

- 1975 — first commercially successful waste-to-energy facility
- 1979 — first commercial reuse/recycling project for waste-to-energy residue
- 1987 — first modern air quality control technology for large-scale, waste-to-energy facilities
- 1994 — first waste-to-energy facility with integrated materials recovery/recycling

According to Weidman, "The people who founded this company in 1908 and those who will lead it in the next century will have shared the same motivations — leading very talented people in developing improved technologies for industry and the environment. We're extremely proud to be a part of this chain of past and future innovation."

Staying safe at Wheelabrator

Wheelabrator Bridgeport employees Don Miller, left, and Carl Cohen are helping Wheelabrator stay safe.

DVD teaches safety tips to trash drivers

By David Liscio

The tipping floors where incoming trash is unloaded at all Wheelabrator waste-to-energy facilities are high-traffic areas with a good deal of heavy-duty vehicles in use.

To reduce the possibility of any accident, Wheelabrator Bridgeport has taken an extra step beyond training its staff and contracted truck drivers about safety. A new DVD, focused on safety when near crane operations or on the tipping floor, is being distributed to all trash haulers.

The eight-minute DVD offers haulers a short course in what to expect upon arrival at a Wheelabrator facility and how to best handle their equipment for utmost safety.

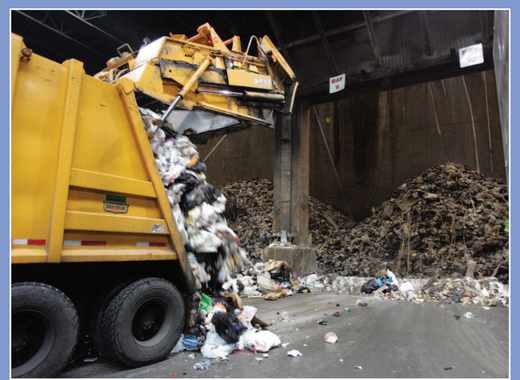
According to Edward Gusciora, environmental health and safety officer at Wheelabrator Bridgeport, the Wheelabrator employee team came up with the ideas to improve safety at the plant, particularly those involving the tipping floor, and crane-operation procedures.

"The ideas have been put on a DVD for distribution to the haulers working with any of Wheelabrator's 16 waste-to-energy plants," he said.

"The DVD explains to our customers and haulers the operations on the tipping floor and crane safety. It also clearly explains what our expectations are and how to behave while on our property," Gusciora said. "Because of traffic, the tipping floor is a high-risk area."

"Once the contractors watch the DVD, we give them a sticker for their hardhats. The system has worked well to this point. Our employees and contractors are highly trained, so this should be a great opportunity for all the haulers," said Gusciora.

A Bridgeport trash truck pulls up to the Wheelabrator scale house.



A truck unloads trash on the tipping floor at Wheelabrator Bridgeport.

There is strength — and safety — in numbers at Bridgeport plant

Hiring more employees translates to a better quality of life for all involved, says Wheelabrator Bridgeport Plant Manager Vin Langone.

The facility recently added four full-time employees to its ranks, a move meant to lessen the burden on those workers frequently forced to work overtime, as well as enhance safety at the plant.

By increasing the staff by four, each shift will have an additional employee. As a result, there's less of a need to work beyond the prerequisite number of hours required of most employees.

"By reducing the number of mandatory overtime hours we require of our operations people, we are giving our employees a better quality of life," said Langone.

The additions can also boost productivity among all employees. With more training time, employees will be able to work smarter and be more knowledgeable about plant operations.

Don Miller, left, and Carl Cohen inspect the plant.

Wheelabrator Bridgeport is one of four facilities within the company to implement this pilot program.

"All of the new employees are working full time," said Langone.

The Bridgeport waste-to-energy plant, with its approximately 70 employees, was re-certified in 2008 for an additional five-year membership at the Star level of the prestigious Voluntary Protection Program (VPP) of the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA).

The facility first achieved Star status in April 2005. Its renewal came after an OSHA team's on-site review, which included interviews with employees and a complete tour of the worksite, found the facility's safety and health programs consistent with the high quality expected of VPP participants.

Through VPP, Wheelabrator and its employees have experienced a decrease in workplace injuries. Associated cost reductions include lowered workers' compensation expenses and positive changes in company culture and attitudes toward safety and health.

Ed Gusciora and Mike Lopez work on the VSP.

Wheelabrator Bridgeport cuts usage of water and electricity

SUSTAINABILITY: from Page 1

Waste Management President and Chief Operating Officer Lawrence O'Donnell III reiterated that strategy during the 20th annual symposium of the Wildlife Habitat Council in Baltimore last November. As O'Donnell put it, green may be today's buzzword among the environmentally conscious, but sustainability isn't a new concept at Waste Management, which for years has been finding ways to use trash as an energy source.

Vin Langone, the Bridgeport plant manager, sent Gusciora to tour the Florida facility to get some ideas to be adapted to the Connecticut plant. "We were looking for ways to save energy and water and ways to improve sustainability throughout the plant," he said, adding the inspection included lighting, timers, motion sensors, fans and water recapture systems.

"Variable-frequency drives versus constant-speed fans were just one option. The little things added up over time can lead to big savings," Langone said.

Gusciora explained variable-speed drives for fans and pumps were among the ways identified to cut costs and simultaneously be more environmentally friendly. "Rather than using a valve to reduce flow, the variable drive can match the amount of energy needed to do the work required," he said. "That's one thing we're looking at. Another is how to shut down the lights when people leave at the end of the day. We're installing motion sensors, so the lights will turn on automatically when somebody walks in, and after a while shut off if nobody is moving."

When it comes to water, the Bridgeport plant recycles 100 percent of its rainwater in certain areas, which can be channeled into a 10,000-gallon settling tank. The plant also has a 200,000-gallon water storage tank where the re-captured water can be pumped and used on demand for in-house operations, such as cooling incinerator ash.

"There are cost benefits in re-using this natural resource because it minimizes the impact to the environment by giving rainwater back," said Gusciora, noting by industry standards, a 10,000-gallon settling tank for rainwater is large.

Another part of the sustainability initiative in Bridgeport involves paper reduction.

"We're trying to cut down on the amount of paper we use in general. We use double-side printing, and whenever possible, we send reports to the state electronically," Gusciora said. "All of this goes back to being more energy efficient in all operations, fine-tuning the processes, even when it comes to the amount of lime, carbon and urea we use for ash treatment or in the stack."

Since Wheelabrator Bridgeport does not have an on-site landfill, the ash is transported by truck to a landfill in Putnam, where the cost of dumping is based on tonnage.

"Reducing the amount of water content in the ash is a big item," said Gusciora. "Company-wide, we hit a milestone with that, just from the savings on the tonnage and the fuel for transportation of the ash."

Contract renewed with communities

CONTRACT: from Page 1

disposal for 18 communities in the southwestern part of the state.

The contract between Wheelabrator and the CRRA expired on Dec. 31, 2008. According to Wheelabrator Bridgeport Plant Manager Vin Langone, the new agreement includes the majority of the original 18 communities that have come to rely on Wheelabrator for safe, reliable trash disposal.

"The bottom line is that as of January 1 we have to have a place to bring our garbage," Milford Mayor James Richetelli Jr. said. "Things have worked out for the past 20 years. We'll continue with a new contract and at a cheaper price."

According to Richetelli, the new contract sets Milford's trash disposal cost at $84.75 per ton, which includes Wheelabrator's $61 tipping fee, a $2 CRRA administrative fee, and another $21.75 for Enviro Express to continue operating Milford's transfer station and to transport that trash to the waste-to-energy facility.

In addition to Bridgeport and Milford, the communities signed onto the new CRRA agreement are Bethany, Easton, Fairfield, Monroe, Orange, Shelton, Stratford, Trumbull, Westport and Woodbridge.

Together the communities will guarantee to send 265,000 tons of municipal solid waste to the plant in return for a guaranteed $61per-ton tipping fee. The final per-ton disposal cost for the respective communities is determined by how much it costs each to sort, temporarily store and eventually truck municipal solid waste to the Bridgeport plant.

Westport officials, for instance, voted for the $61 tipping fee in the CRRA contract, as well as for overseeing their own solid-waste transfer station and trash hauling. The cost of trucking the waste from Westport to Bridgeport is $13.45 per ton plus an $8.56 per-ton transfer-station administrative fee. As a result, the total cost per ton for disposal of its trash in 2009 will be $84.61, compared to about $98 per ton if the transfer station and trucking were not handled in-house.

John Anglace, president of the Shelton Board of Aldermen, said the new $61 tipping fee is a 27-percent cost reduction for the community.

Some communities not participating in the new CRRA contract indicated they could be forced to truck their trash as far away as Ohio. Stamford, for example, began trucking its waste to Ohio in 2007.

Connecticut's landfills are full and trucking trash out of state can prove a more costly alternative, said Langone, noting that fluctuations in fuel prices can make trucking trash beyond the immediate region a gamble.

The Wheelabrator Bridgeport facility processes up to 2,250 tons per day of municipal solid waste from southwest Connecticut, or 740,000 tons annually. It is one of six in-state resource recovery facilities that convert trash to energy. There are also two landfills.

Plant Manager Vin Langone is pleased to have a new contract in place.

OPEN-DOOR POLICY

Have you ever wondered what happens to your trash after it is collected from the curb? We invite you to tour our Bridgeport plant and witness first-hand the journey waste takes as it is converted into electricity.

To set up a tour, please contact:
Wheelabrator Bridgeport, L.P.
6 Howard Ave., Bridgeport, CT 06605
Phone: 203-579-2607

Wheelabrator Technologies Inc.
A Waste Management Company

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Making a difference

Groundwork Bridgeport recognizes Wheelabrator for community service

By David Liscio

Groundwork Bridgeport, a local environmental protection and community preservation advocacy group, believes Wheelabrator Bridgeport is helping it make a difference.

The non-profit group presented the company its Staying Grounded Award for being an outstanding community partner. Plant Manager Vin Langone accepted the award from Richard Tiani, executive director of Groundwork Bridgeport, during a ceremony attended by Connecticut Department of Environmental Protection (DEP) Commissioner Gina McCarthy.

"Wheelabrator has been supportive of Groundwork's efforts in Bridgeport for a number of years, not only financially but by providing volunteers from the ranks of its employees to help with various projects," Tiani said.

Groundwork Bridgeport is among 17 organizations scattered throughout the U.S. Its office has three full-time and four part-time staffers. Projects include upgrading parks and playgrounds, teaching local students about the environment, and even assisting senior citizens with yard work around their homes.

"One of our programs we have expanded in the past couple of years has been very successful. It involves releiving low-income, elderly homeowners of their yard work in Bridgeport and Norwalk," said Tiani, noting Wheelabrator Bridgeport purchased the necessary tools for this project to be successful.

"Wheelabrator bought us lawn mowers, leaf blowers, weed whackers and a variety of hand tools," he said. "We do lots of community outreach and we also have programs that are conducted on a recurrent basis in the schools."

Tiani said Groundwork Bridgeport has adopted the butterfly method of teaching Earth science, ecology and life lessons to students in the city's public schools.

> "Wheelabrator has been supportive of Groundwork's efforts in Bridgeport for a number of years."
> **Richard Tiani**

"We teach high school students how to teach science, math and ecology to elementary school students, using the butterfly as a teaching model," he said.

Here's how it works: "The high school students at the end of February go into the elementary schools and tell the kids all about raising butterflies. The butterflies need a place to live. The elementary students have to decide where to locate the butterfly garden at the school," Tiani said. "The whole process involves lots of learning exercises. For instance, the garden needs at least 10-12 hours of sunlight per day. So the kids have to figure out the path of the sun using a compass and where to put the garden."

The elementary students witness the cocooning and eventual hatch of the butterflies as part of the life cycle. The butterfly-method teaching program annually involves 18-20 students from Warren Harding High School.

"They become the instructors for the elementary students, so when school gets out in June, we hire those same students to maintain the butterfly garden. They also do other projects, like landscape work, and at the end of the summer we have a graduation ceremony for parents, relatives and board members attend. We give out scholarships to two of the students, usually those who are going on to community college," Tiani said. "This year was our 10th anniversary, so Gina McCarthy, the state commissioner of the Department of Environmental Protection, honored us by attending."

Groundwork Bridgeport is focused on urban revitalization and beautification through a variety of landscaping and recreational development initiatives. Its mission is to engage hundreds of youth each year to accomplish its goals and help them learn about each other as they build and maintain city parks, playgrounds and community gardens.

Langone said Wheelabrator Bridgeport plans to continue its support of Groundwork Bridgeport. For more about the organization, go to www.groundworkbpg.org.

Plant Manager Vin Langone, center, accepts an award from Richard Tiani of Groundwork Bridgeport and DEP Commissioner Gina McCarthy.