



# Wheelabrator BALTIMORE News

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Winter 2009

## Cleaner greener BALTIMORE



A view of the Baltimore waterfront.

PHOTO: DAVID LISCIO

## Wheelabrator partners with city

BY MEAGHAN CASEY

The City of Baltimore is on a mission to make its streets cleaner and greener, and Wheelabrator is just one corporate partner pitching in to help.

Wheelabrator has donated \$200,000 to support Mayor Sheila Dixon's Cleaner Greener Baltimore initiative, which aims to reduce litter, enhance gateways, spruce up yards and parks and plant more trees.

"As an environmental company and a responsible corporate citizen, Wheelabrator believes in giving back to our communities by supporting programs where the environment benefits from progressive community support and involvement," said Wheelabrator President Mark A. Weidman. "Wheelabrator recognizes the passion and innovation behind

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Wheelabrator recognizes the passion and innovation behind Mayor Dixon's initiative and we are proud to be a partner.

**Mark A. Weidman**  
*President*

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## Thanks for everything

Baltimore City Councilors, from left, Sharon Green Middleton, Council President Stephanie Rawlings, Robert Curran and Bernie "Jack" Young enjoy Wheelabrator's Garbageman Appreciation Day, which was hosted by Wheelabrator Baltimore.

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## Calverton School: Wheelabrator's newest student symposium team

Baltimore's Calverton Elementary/Middle School students will join the ranks of 11 other teams to participate in the 15th annual Wheelabrator Symposium for Environment and Education this spring.

Since its inception, the symposium has put into action Wheelabrator's long-held belief that businesses and communities should help educators introduce real-life experiences to young adults. The multi-day event, held in Florida each May, tasks the students with identifying an environmental challenge in their community and establishing a long-term solution.

The Calverton rookie team has decided to work in conjunction with its school-based community partners, the Coalition to End Childhood Lead Poisoning and the Coppin Heights Community Development Corporation, to address lead prevention in the Rosemont Community. The project will challenge students, teachers and community members to test toys and other household objects for lead. The students will host an event at the school to report their findings and share the importance of lead prevention.

In addition, Federal Hill Preparatory School students, Baltimore's veteran team, will again compete this year. The team members are hoping to restore a 60-foot area of rocky, unmanaged waterfront, which includes a storm drain run-off, into a true wetlands site. This would be only the second viable wetlands in the Inner Harbor, and could become a showcase for local developers.

# Wishing you a happy, healthy 2009



**Christopher Leyen**

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

In this edition, you will read about Garbageman Appreciation Day, an annual celebration we look forward to each year. It gives us a chance to say "thank you" to the dedicated men and women who collect trash daily and deliver it to our facility.

In November, we welcomed representatives from the Wildlife Habitat Council who had gathered in Baltimore for the organization's 20th annual symposium. We were pleased to offer a tour of our waste-to-energy facility for many

symposium attendees.

On pages 4-5, you will get your own first-hand tour of our operation. The diagram gives you a detailed look at the waste-to-energy process, and how our plant operates. I hope you will find it interesting, and I encourage you to take the extra step and visit our plant. Our doors are always open and tours are arranged on a regular basis.

Best wishes for a happy and healthy 2009. Thank you all for your continued support.

*Christopher Leyen is plant manager of Wheelabrator Baltimore.*

## 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 plant and witness firsthand the journey waste takes as it is converted into electricity.

To set up a tour, please contact:

**Wheelabrator Baltimore**  
1801 Annapolis Rd  
Baltimore, MD 21230  
410-234-0808



A pedestrian walks along the boardwalk in Baltimore's Inner Harbor.

# Cleaner, greener Baltimore

## GREENER from Page 1

Mayor Dixon's initiative and we are proud to be a partner."

"I am excited Wheelabrator is stepping up to promote our environment," said Dixon. "Their support is enabling a two-year, multi-media campaign intended to raise awareness, and educate and motivate behavioral changes we hope will result in a cleaner, greener Baltimore."

Dixon has made cleanliness, recycling and

sustainable growth a cornerstone of her administration's agenda. This year alone, the City increased its tonnage of recycled materials by 20 percent, thanks to a new single-stream recycling program allowing residents to dispose of all recyclables in one day.

In addition, the "Spring Sweep" cleared 460 tons of trash and debris from communities across Baltimore. And, through the Clean and Green Block Action Plan Program, residents can request specific city assistance from the

Bureau of Solid Waste and the Department of Recreation and Parks in cleaning chronic trash problem areas and greening vacant lots and other spaces.

By supporting the Cleaner Greener Baltimore initiative, Wheelabrator – which has been serving Baltimore for 23 years by providing safe, long-term waste disposal and energy creation – continues its mission to improve the lives of the residents in the communities where it does business.





Lawrence O'Donnell III

# Going green

## WM president and COO highlights company's environmental initiatives

By DAVID LISCIO

Green may be today's buzzword among the environmentally conscious, however sustainability is not a new concept for Waste Management, Inc. Year after year, Waste Management has found cutting-edge ways to use trash as an energy source.

This message was the theme of the 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 (WHC). Our employees were



looking to get involved and this organization helped us do just that," he said, noting the council has been responsible for ensuring 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.

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

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

At some facilities, such as the waste-to-energy plant in Saugus, Mass., landfills 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 company's 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 21,000 acres of WHC-certified land.

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 truck 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.

O'Donnell credits the WHC for helping Waste Management achieve its ranking. 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 49 Waste Management sites.

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



Maryland Zoo educator Lauren Butkiewicz brought red-shouldered hawk, Storm, to the symposium.



Waste Management employees Terry Beasy, left, and Darren Johnson of Indiana enjoy the WHC Symposium in Baltimore.



# Turning waste into energy benefits everyone

By KAITLIN RAHL

Americans are producing more trash every year. According to the Energy Information Administration (EIA), a statistical agency of the U.S. Department of Energy, the average American threw away 2.7 pounds of trash a day in 1960. Today, the average American throws away 4.5 pounds of trash daily, an increase of 67 percent.

Waste-to-energy plants burn trash and use the resulting heat to make electricity. While waste-to-energy technology was introduced in the U.S. by Wheelabrator Technologies in the early 1970s, European countries have been using it for more than 50 years. There are currently more than 400 WTE plants in Europe, four times as many as there are in the U.S. Some of the “greenest” countries in the world are relying on WTE as their primary method of waste disposal.

In Denmark, for example, 54 percent of waste is burned and converted into energy, while France is at 50 percent and Switzerland more than 40 percent. Japan is the world leader at a rate of 62 percent. In the U.S., only 12 percent of waste is converted into energy, despite the fact the Environmental Protection Agency (EPA) has determined waste-to-energy plants to have less environmental impact than almost any other source of electricity.

In the U.S., waste-to-energy plants, such as those operated by Wheelabrator, generate enough energy to supply the electricity requirements of millions of

households. Garbage is akin to a mixture of energy-rich fuels. The fuel is composed of materials homes and businesses commonly dispose.

Nevertheless, providing electricity is not the only major advantage of waste-to-energy plants; burning waste also reduces the amount of garbage sent to landfills. According to the EIA, waste-to-energy facilities dispose of the waste of 40 million people, with the average American producing more than 1,600 pounds of waste a year. That waste would normally take up more than two cubic yards of landfill space, which is the volume of a box three-feet-long, three-feet-wide and six-feet-high. Conversely, if that waste were converted into electricity in a waste-to-energy

plant, the ash residue would fit into a box nine times smaller.

The process of converting trash into energy is simple. Trash collection trucks unload the trash into a large concrete storage pit inside the facility. Overhead cranes put the trash into hoppers designed to feed a modern, high efficiency combustion unit. The trash, burning at more than 2000°F, releases its energy, which is recovered by producing steam in a conventional steam boiler. The steam, in turn, is used to generate electricity in a turbine generator.

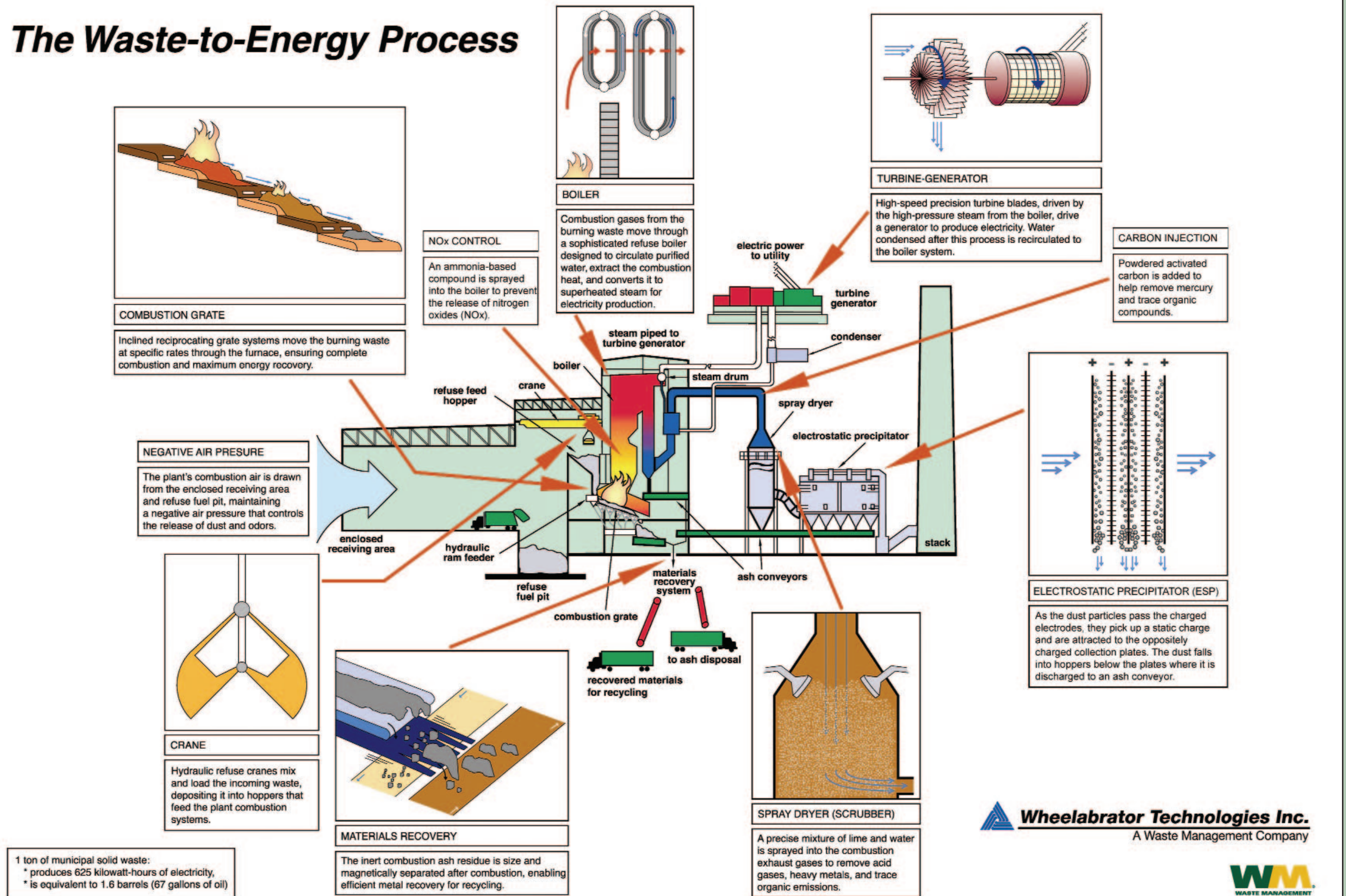
In a waste-to-energy plant, a ton of garbage generates about 550 kilowatts of electricity, enough energy to heat a typical office building, according to the EIA.

In modern waste-to-energy plants, the combustion flue gas is treated by scrubbers that neutralize acid gases by spraying the gas with a mixture of lime and water. This also cools the flue gases, causing pollutants volatilized at the high furnace temperature to condense into particles. These particles are then trapped by an electrostatic precipitator (ESP), preventing them from being emitted into the air. Most other conventional fossil fuel energy plants don't use controls as sophisticated as these.

Converting trash into energy reduces the volume of a community's garbage by up to 90 percent. The remaining 10 percent is an inert ash safely disposed of in modern landfills or used in various commercial applications, such as landfill daily cover material or road paving.

Converting trash into energy reduces the volume of a community's garbage by up to 90 percent.

## The Waste-to-Energy Process



**Wheelabrator Technologies Inc.**  
A Waste Management Company





## GARBAGEMAN APPRECIATION DAY



There were plenty of smiles to go around at Wheelabrator's Garbageman Appreciation Day.

# Wheelabrator puts on the pork for Baltimore's trash haulers

Wheelabrator Baltimore hosted an appreciation barbeque for all the men and women who daily collect and deliver municipal solid waste from Baltimore City and County. More than 200 trucks deliver up to 2,250 tons of garbage to the facility on a daily basis and the city of Baltimore and Wheelabrator wanted to thank everyone for this ongoing commitment to keeping the city clean.

To show their appreciation, Baltimore Mayor Sheila Dixon and Wheelabrator President Mark A. Weidman were hard at work, doling out bagged lunches and shaking hands with the hundreds of trash collectors who dumped their cargo on the plant's sorting floor and then stopped at the long table on their way out.

"It's a great day when everyone can get together like this," said Weidman, deftly tying on a white apron to join the mayor and City Council President Stephanie Rawlings-Blake on the food-service line.

"We appreciate everything these men and women do," said Frank Ferraro, Wheelabrator's vice president of public policy. "Wheelabrator enjoys doing it, reaching out to this part of the

community, to the men and women who actually do the work of picking up the trash."

Glen Middleton, president of union Local 44, which represents most of Baltimore's trash collectors and public works employees, arrived at the picnic to mingle with the crowd.

"Wheelabrator has been doing this for 16 years to show its appreciation," he said. "It sure helps to build morale."

"Love it," said Bill McCardell, who, along with Nick Sikalis from Top Notch Trucking, stopped by to grab a sandwich before resuming their workday.

Several of the city's trash-collection crews took the opportunity to hang around to talk and relax for a few moments. Truck driver Ann Thomas and her route partner Richardo Redds, and Tony Manley and his crewmate Michelle Jernigan spent time sharing a few anecdotes about what it's like to pick up trash throughout the city's diverse neighborhoods.

"We pick up at the projects and also in the wealthy sections of the city," said Manley. "It doesn't matter where because trash is trash."



Bill McCardell, left, and Nick Sikalis of Top Notch Trucking are fans of Wheelabrator Baltimore.



# GARBAGEMAN APPRECIATION DAY

## Garbagemen reflect on changes in waste industry

BY DAVID LISCIO

Gregory George is living testament of just how much the trash industry has changed over the past three decades. Known to many Baltimore trash haulers as “GG,” George has been on the job for 35 years and can tell you the differences in how trash is collected today compared to the 1970s.

“Back in the day, people put out pretty much anything for us to pick up,” said George said. “But that’s all gone. Now we separate and try to recycle as much as possible. It’s better for the environment.”

The veteran garbageman, who has worked collection routes in a variety of the city’s neighborhoods, is currently assigned to recyclables.

“You can’t mix trash with your recyclables any more,” he said. “That’s the difference. And people are going along.”

David Scott, director of Baltimore’s Department of Public Works, and Valentina Ukwuoma, head of the city’s Bureau of Solid Waste, were quick to agree.

“When we first implemented recycling, the system was complicated. There were too many restrictions,” said Scott. “What we were offering didn’t give people an incentive to recycle.”

Baltimore’s early recycling effort asked residents to separate metal, plastic, paper and other items into bins representing specific waste streams. Now, the recycling is collected as a single stream – allowing residents to lump all recyclables into a single bin for collection rather than several.

“Once we went to single stream, we saw a 26 percent increase in recycling citywide,” said Scott. “These days, everybody is recycling – schools, businesses, apartment buildings — because it’s easy. It’s either one or the other – trash or recyclables – making the process much better.”



Glen Middleton, president of Union Local 44, celebrates with Baltimore City and Baltimore County trash collectors.



Wheelabrator President Mark A. Weidman, left, shakes hands with a Baltimore trash collector.



Mark A. Weidman is ready to serve.



Trash hauler April Young arrives in her truck.



Environmental symposium students from Calverton Middle School enjoy the event at Wheelabrator Baltimore.



# Taking a closer look

## WHC members tour Wheelabrator

By DAVID LISCIO

Hundreds of council members from the Wildlife Habitat Council (WHC) gathered at the Baltimore Waterfront Marriott Hotel in November for the organization's 20th annual symposium: 20/20 Vision: Celebrating the Past, Looking to the Future.

A field trip to Wheelabrator Baltimore was among the many activities for council members, and a busload took advantage of the opportunity. Plant Manager Chris Leyen led one of two group tours through the plant and the adjacent bass fish hatchery alongside the river.

Inside the plant, WHC members got an up-close look at the waste-to-energy process, in which trash is burned in the three boilers that reach temperatures of 2,500 degrees during the combustion process. The resultant heat is used to turn water into steam that is used to power turbines and create electricity. At full capacity, the plant can generate enough energy for sale to Baltimore Gas & Electric Company to power approximately 68,000 Maryland homes annually — an energy savings of 1.5 million barrels of oil.

The plant also supplies steam to Trigen Baltimore Corporation for the downtown heating and cooling loop that provides heat and cool air to Baltimore retail and commercial buildings. It has the capacity to supply Trigen with up to 220,000 pounds of steam per hour, more than 40 percent of the city's steam requirements.

The hatchery is a temporary home to native bass fish, raised and then released into the Maryland rivers. A covered wood frame structure containing two large pools teeming with bass, the hatchery was of interest to WHC members since it is the Wheelabrator plant's primary conservation project, raising native fish for release into Maryland rivers.

In November, the Maryland Bass Foundation released more than 1,700 largemouth bass into the Middle River. The majority of the fish were in the 6- to 8-inch range, but there were many that were more than 10 inches. All of the fish were released in heavy grass beds located in creeks off of the main river. In addition to the bass released in Middle River, an additional 1,800 baby bass were released into the headwaters of the Choptank River and Tuckahoe Creek on Maryland's Eastern Shore.

The WHC symposium featured workshops, a touch table of wildlife samples, the Flying WILD bird festival, and exhibits by the U.S. Fish and Wildlife Service, the U.S. Environmental Protection Agency, the Grazing Lands Conservation Initiative, Cornell University, Mitel, Ducks Unlimited, DTE Energy, World Resources Institute and Bridgestone Americas Holdings.

"For 20 years, the WHC has led ground-breaking initiatives for the benefit of wildlife and conservation education," said WHC President Robert Johnson. "WHC members embrace their role as leaders in environmental stewardship at the local, national and global level. We are celebrating the efforts of these companies and their employee volunteer teams in stepping up to meet the challenges of creating a healthy and bio-diverse natural world."

Above, Plant Manager Chris Lyons leads a Wildlife Habitat Council tour group while a member takes a picture of the furnace. Below, WHC members prepare for their plant tour with hard hats and ear phones.

