Wheelabrator BALTIMORE News

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Energizing Baltimore

Baltimore plant in operation for 23 years

By Meaghan Casey

In 1985, Wheelabrator Technologies, Inc., a wholly owned subsidiary of Waste Management, Inc., changed the landscape of waste disposal in Baltimore with the introduction of a state-of-the-art waste-to-energy facility.

Designed, constructed, owned and operated by the Hampton, NH-based waste-to-energy company, Wheelabrator Baltimore has been providing dependable, environmentally-safe disposal of municipal solid waste for thousands of Baltimore City and County residents for the past 23 years. 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 providing 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.

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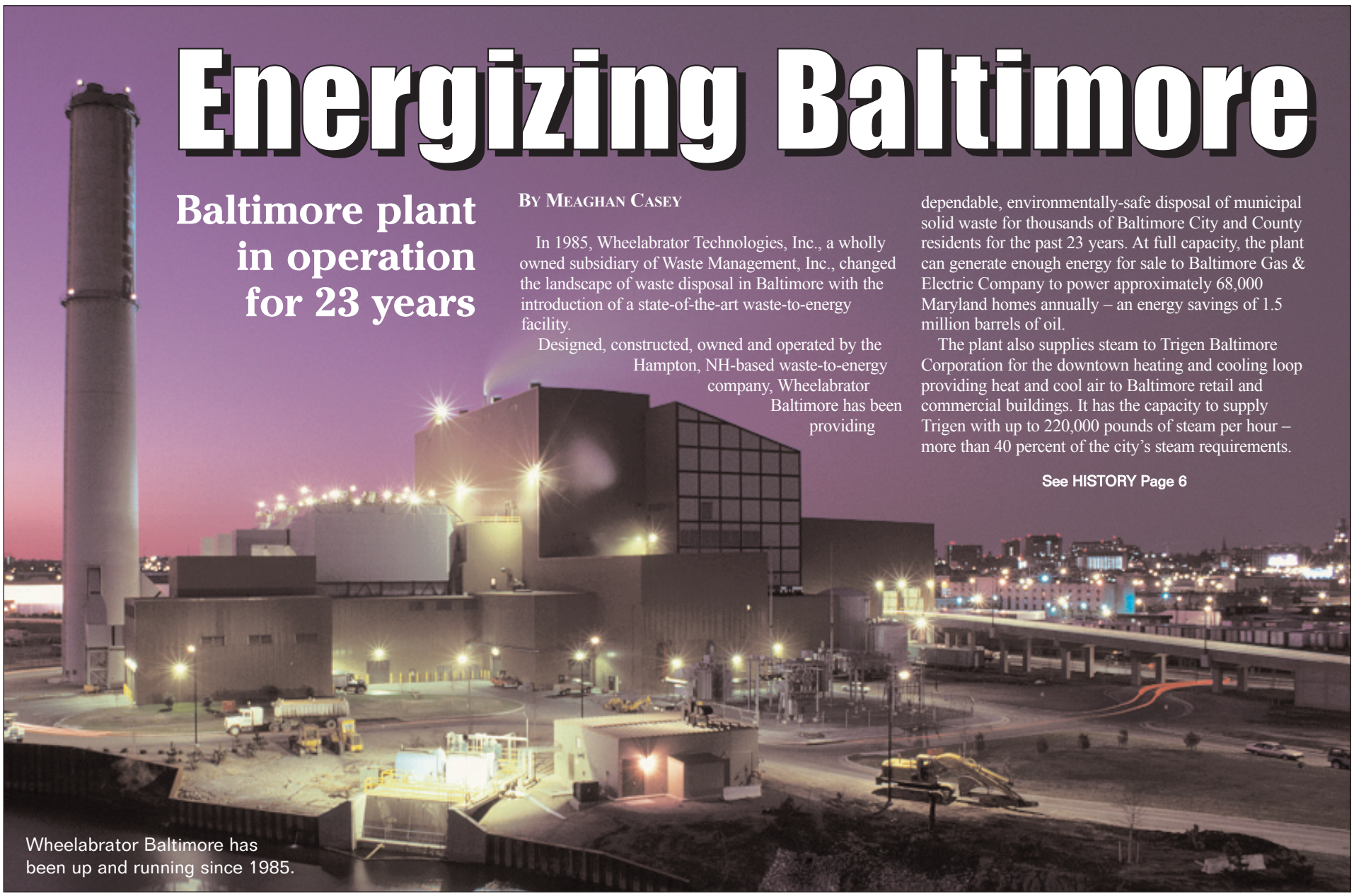

Wheelabrator Baltimore has been up and running since 1985.

inside

Safety superstars

Wheelabrator Baltimore earns elite OSHA designation

By Paul Halloran

At Wheelabrator Baltimore, "safe" is anything but a four-letter word.

Employees at the waste-to-energy plant take workplace safety extremely seriously, and their commitment in that area has earned them membership in an elite club.

In May 2007, Wheelabrator Baltimore officially received the highest safety honor awarded by the U.S. Dept. of Labor's Occupational Safety and Health Administration (OSHA). Wheelabrator Baltimore was designated a Star worksite in OSHA's Voluntary Protection Program (VPP), an honor shared by less than

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Shift Supervisor Len Hadley and Plant Manager Chris Leyen display the VPP flag.

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Committed to our community

Christopher Leyen

Our door is open to you!

To set up a tour, contact:
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Thank you for your interest in Wheelabrator Baltimore. As part of our commitment to the community, we have begun publishing this newsletter to keep you informed about who we are and what we do.

In this inaugural edition of *Wheelabrator Baltimore News*, you will learn more about the history of our facility, which has been providing dependable, environmentally safe disposal of municipal solid waste for 23 years. We remain committed to generating clean, renewable energy while maintaining the highest possible safety standards, as recognized by our designation from OSHA as a Voluntary Protection Program (VPP) Star site.

You will meet a group of our employees who have been here for 20 years or more, and who are dedicated to serving the needs of the people of Baltimore and the surrounding area.

"Our goal is to be a good neighbor to the people who live and work in Baltimore."

I invite you to applaud the work of Baltimore City students at Federal Hill Preparatory School, who embarked upon creating a community-wide awareness program to help protect our waterways and storm drains. We are proud to support their work, as well as the work of the students and staff at the South Baltimore Learning Center.

Our goal is to be a good neighbor to the people who live and work in Baltimore. Over the years, we have had the pleasure of welcoming some of you to our facility. Thank you for your awareness and support, both then and now. For those of you joining us for the first time, welcome.

Christopher Leyen is plant manager of Wheelabrator Baltimore.

Plant manager feels at home in Baltimore

Christopher Leyen has been working for Wheelabrator Technologies Inc. for 18 years.

BY PAUL HALLORAN

In 18 years working for Wheelabrator, Christopher Leyen has traveled from his native New York to Pennsylvania to Florida, before landing in Baltimore as plant manager five years ago. Based on the performance of the plant since he arrived, he seems to have found a home.

"I was brought on to improve plant operation and reliability," Leyen said of his current position. "Everything has been going well."

Indeed. Wheelabrator Baltimore is a smooth operation, with 67 employees working to process 2,250 tons of waste daily and convert it into clean, renewable energy. Last year, the plant earned the highest safety designation – VPP Star – awarded by OSHA.

"All the employees worked very hard to attain VPP Star status," Leyen said. "They achieved a level of excellence that is very rare in this country."

Leyen grew up in New Windsor, N.Y., a town of 9,000 located on the Hudson River, just north of the U.S. Military Academy at West Point. He majored in civil and environmental engineering at Clarkson University. His first job was as a plant engineer at Wheelabrator Westchester in Peekskill, N.Y., where he worked seven years.

From Westchester, Leyen worked as a regional engineer in Pennsylvania, before spending four years at the Wheelabrator North Broward plant in Pompano Beach, Fla. as maintenance manager and operations manager. He became plant manager at Wheelabrator Baltimore in 2003.

"Wheelabrator is a good company to work for," Leyen said. "There are opportunities to advance throughout the company."

Leyen and his wife, Kim, have three children: Bryanna (10), Tristan (9) and Aidan (9).

Wheelabrator Baltimore Quick Facts

The Baltimore facility processes up to 2,250 tons per day of municipal solid waste. At full capacity, the plant can generate more than 60,000 kilowatt-hours of electrical energy per hour, which is the equivalent of supplying all of the electrical needs of 68,000 Maryland homes.

Caring for the community

Wheelabrator has supported SBLC for 15 years

By Paul Halloran

The South Baltimore Learning Center relies on private funding for half of its $1.2 million annual budget. That's a significant amount to raise, so it is important to have a long list of loyal benefactors. According to SBLC Executive Director Sonia Socha, Wheelabrator Baltimore is at the top of that list.

"We would not be here today if not for the beginning of our partnership with Wheelabrator," Socha said, harkening back to Wheelabrator's original $5,000 donation 15 years ago that allowed the struggling SBLC to pay the rent and other bills. "We needed money to keep the place going."

Today, the SBLC is not only still going, it is thriving. Located in a beautifully restored former police station on East Ostend Street, the community-based non-profit provides basic education and computer training to more than 800 adults, the vast majority of whom are working toward getting a high school diploma. The SBLC offers pre-GED and GED prep classes, as well as an External Diploma Program, an alternative to the GED for earning a high school diploma.

In addition to the education courses, the SBLC offers computer classes and serves as a de-facto community technology center, according to Socha. It also provides career counseling and helps people find jobs.

"We are proud of our long association with the South Baltimore Learning Center," said Wheelabrator Baltimore Plant Manager Christopher Leyen. "The SBLC provides critical services to people who need it most. We are happy to help in any way we can."

According to Socha, Wheelabrator's support goes well beyond monetary assistance. "When we were moving (back into the renovated building in 2003), Wheelabrator provided a truck and manpower," she said. "They helped us clean out the fourth floor. They did things we didn't have the capacity to do.

"It has never been just about the money with Wheelabrator," Socha added. "That's what makes our relationship so special."

South Baltimore Learning Center Executive Director Sonia Socha is grateful for the support of Wheelabrator Baltimore and Plant Manager Chris Leyen.

From the beginning

Veteran employees celebrate two decades of service

By Meaghan Casey

During the mid-1980s, a group of 13 Wheelabrator employees witnessed the birth of a new form of renewable energy production in Baltimore. Today, those 13 remain committed to a company that has provided an essential public service since it opened more than two decades ago.

"One of the truly unique things about Wheelabrator is how strongly our employees identify with this company," said Mark Weidman, president of Wheelabrator Technologies, Inc. "That they are part of the company goes without saying, but what is unique is that this company is also a part of them."

Thomas Lipka, one of the Wheelabrator Baltimore employees with at least 20 years of service, launched his Wheelabrator career in 1985, just as operations in Baltimore commenced. Lipka, a maintenance planner, entered the company as a first-class mechanic and welder.

"I was young – 24 years old – looking for steady work when this plant opened," said Lipka. "I went on to become lead mechanic and maintenance planner. I've done just about everything here, even filling in with purchasing and as the plant engineer. In that respect, I'm kind of the go-to guy."

Born and raised in Baltimore, Lipka is a 1980 graduate of Baltimore Polytechnic Institute. "I went there for the sports, but once I started learning about engineering, it was interesting, especially the mechanics," he said.

A self-described sports fanatic, Lipka coaches in local youth baseball and football leagues, as well as a recreational basketball team. He first became involved coaching his oldest son and has remained active in all three arenas.

"I'm still a kid at heart," he said. "Football's my love, but I'll try anything – even jet skiing or wakeboarding. I'm never sitting down."

Looking back at the earliest days at the plant, Lipka commends the company for its improvements with regards to safety.

"Safety procedures have turned around 180 degrees," said Lipka. "When I first started 20 years ago, we didn't have to wear hard hats or steel-toe shoes or safety glasses. That's been the biggest change – implementing safe job procedures."

Ron Rose, crane operator and ash handler, agrees.

"During the early start-up days, the regulations weren't as strict," said Rose. "Now, we have programs like VPP and Safety on Purpose, making us more aware of the industrial aspect of it."

Rose, born and raised in Baltimore and a graduate of Mergenthaler Vocational-Technical High, began working for Wheelabrator as a laborer in 1988. He cites mobility as one of the company's strengths.

"It's always been a company that's offered the opportunity to go in any direction," said Rose. "I've moved around to different positions, learning new aspects of the plant."

Harry (Bill) Rectanus, originally hired as a laborer in 1984, was promoted to plant operator this year.

"If you have the willingness to work and learn, you can make it anywhere," said Rectanus.

Originally from Pennsylvania, Rectanus served as president of the volunteer fire department in his hometown. Both Baltimore and the concept of Wheelabrator were new to him in 1984, but it was a chance he's glad he took. Today, he admits some of the early struggles have made the company stronger and smarter. In 1989, he was able to bring his expertise to Wheelabrator's plant in Gloucester County, NJ, where he was stationed for three months during its start-up.

Chuck Reynolds, who started in 1987 as a third-class maintenance mechanic, has also experienced a fast-paced career track. He moved from third-class mechanic to second-class to first-class, before he was promoted to lead mechanic. He attributes employee longevity partly to the decisions and priorities of company leaders.

"The way it's managed today, it's even more towards the people than the production," said Reynolds. "The way management treats its employees, looking out for safety and making sure everyone goes home in the same condition they came in, that's impressive."

Crane operator Andre Smith, a Baltimore County resident and a 1981 graduate of Woodlawn High School, was working in construction and food service before finding his niche at the plant. He admits the idea of waste-to-energy was surprising to him.

"It was all new to this area," said Smith, who was working for the construction company that built the plant before joining the ranks of the Wheelabrator start-up crew in 1984.

Walt Sweet, also a crane operator, knew little about the industry as well.

"I didn't know that people's trash could be made into energy," said Sweet. "I didn't realize you could build a business on waste. That was shocking."

Sweet, who was hired in 1988, notes that changes in safety and operations have made a world of difference in his day-to-day work routine.

"There have been a lot of modifications to make the system better," said Sweet.

A lifelong Baltimore resident, Sweet is a 1969 graduate of Frederick Douglass Senior High School. He is a season-ticket holder for his beloved Baltimore Ravens. In looking down the road to retirement, Sweet will miss the people he has come to know so well, but anticipates passing on his knowledge to the next generation of employees.

Other employees with at least 20 years of service (and the year they started) include: Michael Shepherd (1984), Donald Kowalewski (1984), Victor Johnson (1984), James Blankenship (1985), Robert Venuto (1985), John Garrett (1986) and Frank Onorato (1988).


James Blankenship


John Garrett


Victor Johnson


Donald Kowalewski


Thomas Lipka


Frank Onorato


Harry (Bill) Rectanus


Chuck Reynolds


Ron Rose


Michael Shepherd

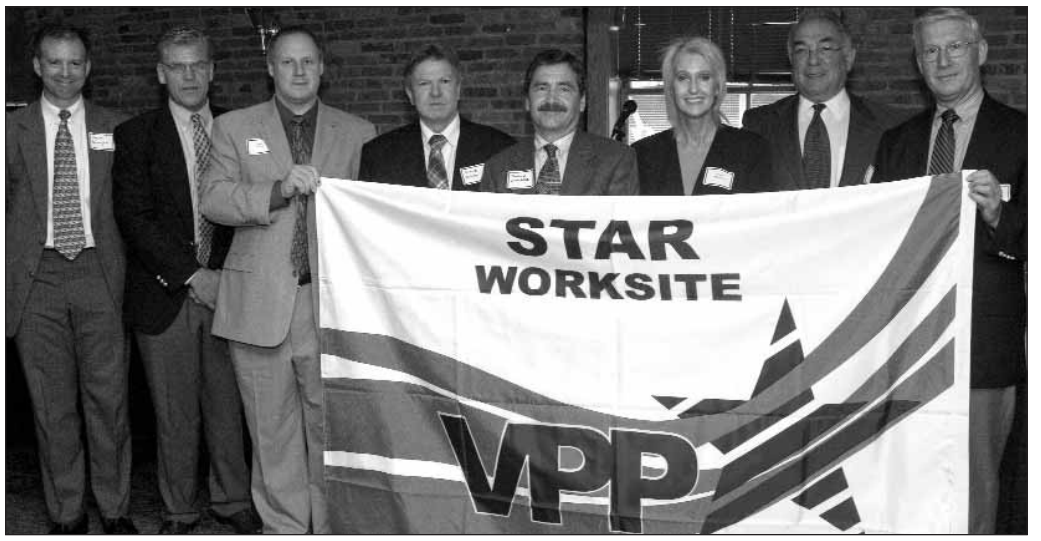

Andre Smith


Walt Sweet


Robert Venuto

At left, Wheelabrator Baltimore veteran employees include from left, Bill Rectanus, Chuck Reynolds, Walt Sweet, Ron Rose, Thomas Lipka and Andre Smith.

PHOTO: MEAGHAN CASEY



Wheelabrator Baltimore Plant Manager Christopher Leyen, third from left, accepts the VPP Star flag from OSHA officials.

Wheelabrator Baltimore earns elite OSHA designation

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three-hundredths of a percent of the nation's worksites.

"The VPP Star distinction means that employees of our facility voluntarily achieved a level of safety excellence rare in this country," said Wheelabrator Baltimore Plant Manager Christopher Leyen. "Many hours of hard work went into preparing for the OSHA evaluation and all of our employees share in the honor."

Of the seven million worksites monitored by OSHA, Wheelabrator Baltimore is one of only approximately 2,000 to receive VPP Star status, a designation it also earned from the Maryland Occupational Safety and Health (MOSH). It was the first VPP Star site in Baltimore City.

Created in 1982, VPP recognizes and promotes effective workplace safety and health management. Companies in the program achieve average injury rates 50 percent lower than other companies in their industry.

Requirements for application to VPP include a high degree of management support and employee involvement; a high-quality worksite hazard analysis; prevention and control programs; and comprehensive safety and health training for all employees. A team of OSHA inspectors, accompanied by industrial hygienists, spend a week touring the worksite and observing the programs and procedures in place.

To prepare for the inspection, Wheelabrator Baltimore committed itself to accountability, the identification and elimination of hazards and the active involvement of employees in their own protection.

"It was a big process getting everybody on board," said Len Hadley, Wheelabrator Baltimore shift supervisor, who was chair of the Safety Committee during the VPP certification process. "Once everybody started to see improvements, they bought in."

Hadley, who noted the plant has gone more than 280 days without a lost-worktime injury, said every employee has a role to play in enhancing the safety culture to the point of VPP Star status. "Everybody here has the right to stop a job if they think it is unsafe," he said.

In 2001, Wheelabrator set a goal to have all 21 of its energy facilities certified by OSHA as VPP Star workplaces. The company reached that goal last year, an achievement only nine other companies in the U.S. have reached.

Energizing Baltimore for 23 years and counting

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"Wheelabrator's energy supply is a true asset to the community, providing both electricity and steam," said Gerald Antrobus, director of construction for Wheelabrator Technologies, who served as senior project manager for the building of Wheelabrator's first waste-to-energy plant, in Saugus, Mass. "This is unique to Baltimore, but it's helped the city out a lot. As the price of oil goes up, alternate sources of energy become more and more in demand."

The Baltimore plant was the third to be built by Wheelabrator, following successful launches in Saugus and Westchester County, NY.

Antrobus, who has been with the company since 1974, describes the Baltimore plant as the sister plant to the Westchester facility. Both can process up to 2,250 tons of municipal waste per day and can generate more than 60,000 kilowatts of electrical energy per hour.

"It was a smooth start-up because we had just finished the Westchester project, and we had the operating experience from Saugus," he said. "We continued to gain more insight with each one."

Wheelabrator's presence in the Baltimore community developed out of need. The city attempted to rely upon a pyrolysis plant for its trash disposal. It was one of three sites in the country authorized as a pilot, but the experimental technology ultimately failed and closed in 1979. At that point, the Baltimore area jurisdictions formed a regional authority to develop a new plan for solid waste disposal. The Northeast Maryland Waste Disposal Authority negotiated with Wheelabrator to build a plant, utilizing the proven mass-burn resource recovery system.

The process the plant uses is simple. Incoming trucks deliver trash to an enclosed reception area and deposit it into a concrete receiving pit. Overhead cranes then transfer the trash into boilers, where temperatures exceed 2,500 degrees in order for combustion to occur. Air to feed the combustion is drawn from the receiving building, sustaining a negative pressure and preventing odors or dust from escaping. Power boilers recover energy released during the combustion process, in the form of high-pressure steam, and a turbine generator converts the steam into electrical energy.

The facility successfully reduces the volume of incoming waste by approximately 90 percent. It also recovers ferrous and non-ferrous metals from the ash residue, which are then shipped off-site to be recycled. The ash is then used by the City of Baltimore for daily cover at its Quarantine Road landfill.

According to Antrobus, one of the plant's strengths is its location. Because Baltimore's streets are so narrow, smaller garbage trucks are needed, thus necessitating more frequent trips back and forth between drop-offs. Wheelabrator's site, in the heart of downtown, is easily accessible for the trucks, allowing them to use less gas and diesel fuel.

Today, Wheelabrator operates 16 waste-to-energy facilities and five independent power production facilities in 10 states. Wheelabrator has been successful in developing progressive public and private partnerships; integrating source reduction, recycling and landfill options; introducing new energy and environmental technologies; and demonstrating operating procedures that have set industry standards for efficiency and regulatory compliance.

Federal Hill students shine at Wheelabrator Symposium

SYMPOSIUM: from Page 8

traveled to Sunrise, Fla., for the two-day symposium event sponsored by Wheelabrator. Each school sent a team of 10 students to present their projects, using computer graphics and visuals, in front of a VIP panel of educators, elected officials and community volunteers.

Applying lessons learned in the classroom to real-life issues, the students showed tremendous insight and poise. "Their presentations reflected the amount of work they put into their projects in the months leading up to the symposium," said Sapienza.

The students worked on their project three days a week during the beginning of the school day. Wheelabrator Baltimore Operations Manager Jim Robertson worked with team members and teachers Jeff Byerly and Colleen Campion throughout the project.

Wheelabrator honored Baltimore students with the Creativity Award at a recognition dinner held at the conclusion of the symposium presentations. They also received a $1,000 donation for the school, as well as gifts for the students and teachers who participated.

In addition to the positive experiences the students take away from the symposium, when they begin applying for college every student who has participated in the symposium can be considered for a four-year scholarship to attend Fisk University in Nashville, Tenn. This is a result of a partnership established between Wheelabrator and Fisk when the symposium began in 1996. To qualify, students must meet certain criteria and be reviewed by a selection committee.

Wheelabrator Director of Community Relations Linda Sapienza, right, presents the Federal Hill team with the Creativity Award.

Not stuck in neutral

Wheelabrator plays key role in reducing CO_2 emissions

By Paul Halloran

In an age when global warming has gained international attention and scrutiny, there has been a concerted effort to reduce emissions of carbon dioxide and other greenhouse gases which are believed to contribute to a worldwide change in climate.

"Carbon neutral" refers to a net of zero carbon release into the atmosphere, which is brought about by balancing the amount of carbon released with the creation of a commensurate amount of carbon emissions reduced or avoided.

According to the EPA, of all the solid waste management options, waste-to-energy does the most to reduce greenhouse gas releases into the atmosphere.

Waste-to-energy technology, such as that employed by Wheelabrator Baltimore, has proven to be even better than carbon neutral. Here is how waste-to-energy is playing a key role in the fight against global warming: The trash that is burned by waste-to-energy facilities is comprised primarily of biomass organic material — i.e. food, wood and paper. The combustion of that type of material counts as zero carbon emissions.

Trash that is sent to waste-to-energy plants also includes plastics, textiles and other materials made from petroleum. They create carbon dioxide when burned, but only a small percentage of waste-to-energy's direct emissions fall into that category.

Waste-to-energy plants such as Wheelabrator Baltimore help avoid release of greenhouse gas emissions in three ways. First, waste-to-energy plants generate electricity by using the heat from the combustion of the trash to create steam in high-efficiency boilers. The steam in turn powers electric generators. Producing electricity with trash avoids the greenhouse gas emissions associated with conventional electric power plants, which typically burn coal or oil.

Second, the trash that is converted into energy in a waste-to-energy plant, having already been subjected to recycling by households and businesses, would either go to a waste-to-energy plant or landfill. Waste that is placed in a landfill decomposes over time, creating methane gas, which is 23 times as potent a greenhouse gas than carbon dioxide. Even well controlled landfills that collect the gas and use it to create electricity are not able to collect 100 percent of the methane. This uncaptured methane, however small a quantity, would be released as a greenhouse gas emission.

Finally, waste-to-energy plants also avoid greenhouse gas emissions by recovering ferrous metals, such as iron and steel, from ash residue left after combustion of the trash. These metals are sent off to recycling facilities. Making new iron and steel from that recycled material results in less carbon dioxide emissions.

The net effect of waste-to-energy technology when it comes to carbon dioxide emissions is that for every ton of municipal solid waste that is converted into electricity at a waste-to-energy plant, approximately one ton of carbon dioxide is avoided or offset. That figure was arrived at by researchers at universities and the U.S. Environmental Protection Agency (EPA).

Using this rule of thumb, in 2007, Wheelabrator Baltimore was responsible for more than 650,000 tons of carbon dioxide being avoided. Company-wide, Wheelabrator-operated waste-to-energy plants were responsible for more than seven million tons of carbon dioxide being avoided.

According to the EPA, industry wide, waste-to-energy plants annually prevent the release of more than 30 million tons of greenhouse gases such as carbon dioxide.

The U.S. Conference of Mayors supports a seven percent reduction in greenhouse gases from 1990 levels by 2012 and recognizes waste-to-energy technology as a means to achieve that goal. Also, the Global Roundtable on Climate Change has identified waste-to-energy as a means to reduce carbon dioxide emissions as well as methane emissions from landfills.

Being even better than "carbon neutral" is another example of how Wheelabrator and waste-to-energy are helping to protect the environment.

Soap stars

Federal Hill students win award for creativity at Wheelabrator Environmental Symposium

By Meaghan Casey

Students at the Federal Hill Preparatory School in Baltimore set out to make Baltimore a cleaner place — and they did it with the environment in mind.

In preparing a project to present at the Wheelabrator Symposium for Environment and Education, the students in grades 6-8 set out to create a community-wide awareness program to help protect local waterways and storm drains. The students ultimately created an organic liquid soap that has minimal impact on the environment.

The symposium, held annually in May, challenges middle school students to participate in a six-month learning project to identify an environmental challenge in their community and develop a long-term solution. The goal is to foster environmental and social awareness in the youth.

"The symposium has been held for 14 years, and every year the students continue to amaze me," said Linda Sapienza, director of community relations for Wheelabrator Technologies. "Sponsoring and coordinating the symposium is all part of Wheelabrator's philosophy of giving something back to our communities. It's really wonderful to see the enthusiasm and dedication these students bring to the event year after year."

The students from Federal Hill Preparatory School labeled storm drains near the school in order to increase awareness of what was going into the drains and thus ending up in Chesapeake Bay. With that in mind, they created a soap that would have minimal impact on the waters of the bay.

Ten schools, representing Florida, New England and the mid-Atlantic region,

See SYMPOSIUM Page 6

Above, symposium judges, from left, Ron Magill, Patrick Quinn, Emily Lagerquist and Sue Sturges. Below, Federal Hill Preparatory School symposium participants included, seated from left, DeAndre Sleet, MarqLiah Harris, Sabrina Stevenson, Antonia Miles and Carina Smith; standing, teacher Jeff Byerly, Christian Smith, Angela Newby, LaTarsha Burroughs, Wheelabrator's Jim Robertson, Donte Llyod, Malik Scott, and teacher Colleen Campion.