

Not stuck in neutral

Wheelabrator plays key role in reducing CO₂ 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

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.

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.

Waste-to-energy technology, such as that employed by Wheelabrator Saugus, has proven to be even better than carbon neutral. Here is how waste-to-energy is playing a key role in the fight against



You can go home again

Radebaugh back where his career began: Saugus

BY MEAGHAN CASEY

As a control board operator at Wheelabrator Saugus in 1975, Daniel Radebaugh was making history. He was part of a revolution that would change the way people view waste disposal and energy conversion. He witnessed growth in a company that has become the nation’s most successful municipal waste-to-energy contractor, establishing 15 other facilities. Radebaugh went on to serve as plant manager at three of them.

Today, Radebaugh has come full circle. After a 25-year hiatus, he has returned to his roots, rejoining the team at Wheelabrator Saugus, after being hired in February as maintenance manager.

The motivation to return?

“John O’Rourke,” he answered.

O’Rourke, hired as plant manager last spring, has known Radebaugh for more than 15 years. The pair worked together

See RADEBAUGH Page 6

See CARBON FOOTPRINT Page 6

Inside the edition

Breakthrough Performance Page 3



Hands-on experience Pages 4-5



Pre-Sort Standard
US POSTAGE
PAID
Grant
Communications

We had to let off some steam



JOHN O'ROURKE



Please be assured that Wheelabrator takes seriously its commitment to being a good neighbor in Saugus and we remain committed to providing safe, environmentally sound waste disposal and production of clean energy.

In the first two weeks of May, our plant underwent repairs and maintenance to both boilers and maintenance to the steam turbine generator that produces electrical energy. The work on the steam turbine takes place approximately once every five years.

While the turbine was out of commission for maintenance, the steam that would normally be sent to the turbine to power it was vented through the roof of the plant. The steam is pure water that is produced when water is heated by the boilers used to process waste.

It is important to note that there were no pre-existing problems with the turbine; rather, this was scheduled maintenance.

We were made aware that the noise produced by the venting of the steam may have caused an inconvenience for some nearby residents, and for that we apologize. We did take steps in advance to mitigate the noise by installing silencers on the vent exhaust system. Unfortunately, that was not enough to avoid the noise becoming an issue.

I have been asked why the noise had not been a problem in past years during turbine generator outages. We had formerly used a drag valve venting system, but we had problems with that system and had to switch to an ERV (Energy Recovery Ventilator)

system. We had full confidence that this system would operate with no problems.

Once the system was put into operation, we discovered there was a change in the audible pitch resulting from the use of the ERV system. At that point, we were not able to revert to the drag valve system or bring in another technology to prevent this audible change.

When we discovered the problem we reached out to public officials, responded to questions and complaints directed to the plant and placed newspaper ads to keep residents informed on what was happening. The work, which began on May 3, was completed in two weeks.

Going forward, we have engaged the services of a noise expert to consult with us and we will explore alternative technology to avoid a reoccurrence of this problem.

Please be assured that Wheelabrator takes seriously its commitment to being a good neighbor in Saugus and we remain committed to providing safe, environmentally sound waste disposal and production of clean energy.

Thank you for your understanding.

John O'Rourke is plant manager at Wheelabrator Saugus.



Workers perform maintenance work at Wheelabrator Saugus.

Wheelabrator SAUGUS News

A PUBLICATION OF:
Wheelabrator Saugus, J.V.

H. Bruce Manning
Regional Vice President

John O'Rourke
Plant Manager

Wheelabrator Saugus, J.V.
100 Salem Turnpike
Saugus, MA 01906

Tel. 781-233-7600
Fax 781-231-2793

www.wheelabratortechnologies.com

PRODUCED BY:



GRANT COMMUNICATIONS
CONSULTING GROUP
781-598-8200
e-mail: gccg@grantgroup.com

Taste for Education

SBEC holds annual fundraiser for Saugus Public Schools

BY MEAGHAN CASEY

More than 300 people came together in support of the Saugus Public Schools at the 16th Annual Taste for Education.

Held on April 28 at the Danversport Yacht Club, the event was organized by the Saugus Business Education Collaborative (SBEC). Since its founding in 1992, the SBEC has raised more than \$250,000 for the Saugus Public Schools and has successfully promoted the involvement of community and business leaders in the academic development of the town's students.

As an active participant, Wheelabrator Saugus has a hand in most of the SBEC's fundraising efforts and is represented by Linda Sapienza, director of community relations for Wheelabrator Technologies. Sapienza plays a direct role in SBEC programs such as the Adopt-a-School partnership with the Waybright School, funding and participating in literacy programs, field days and other enrichment activities.

Proceeds raised during the Taste for



Students from the Saugus High School jazz band performed at the annual Taste for Education event.

Education will be used to fund mini-grants for Saugus teachers and to restore and fortify programs in the Saugus Public Schools. The 2007 event brought in more than \$15,000.

This year's fundraiser featured cuisine donated by area restaurants and caterers, including the Hilltop, Kowloon, Prince, Border Café, Danversport Yacht Club, Kelly's Roast

Beef, Nick's Place, Fuddruckers, North End Café, Avellino's Ristorante, Piantadosi Baking Co., Out of Asia, A Sweet Deal, Tumble Inn, Focaccia Ristorante, Edible Arrangements and Starbucks. DJ Mike Gallant of Perfect Parties and the Saugus High School Jazz Band provided the entertainment. Guests also enjoyed raffle prizes, as well as silent and live auctions.



Wheelabrator Saugus Breakthrough Performance Leadership team leaders, from left, John O'Rourke, Bob Faia, Bill Hoen, Ed McCarthy and Dan Radebaugh.

Breakthrough Performance

Wheelabrator builds leaders through strong communication and team spirit

BY MEAGHAN CASEY

As part of Waste Management's Breakthrough Performance Leadership (BPL) program, employees at Wheelabrator plants are learning that operational success is best achieved through communication and team spirit.

BPL is a program that will engage employees by implementing systems to help them perform the best they can and by developing strong leaders.

"It's how we develop the best people to go along with the best data and best assets," said Waste Management CEO David Steiner. "BPL is a way of investing in our employees' development and showing that we care about them."

Wheelabrator Westchester (NY) was chosen to spearhead the pilot program last year for Wheelabrator Technologies, a wholly-owned subsidiary of Waste Management.

"From Westchester, some of the results include setting

goals and expectations for 2008 and increasing communications between departments using a site within the local network, similar to a blog," said former Wheelabrator Westchester plant manager Tom Maillet. "BPL helped me recognize that we were taking some of the basics for granted as a team."

Maillet is now implementing the program at nine Wheelabrator facilities, including the Saugus plant. Full implementation of BPL will occur at all sites by the end of the year.

In Saugus, BPL teams, led by employees Ed McCarthy, Scott Manning, Richard Zwicker and Bob Faia, are working to improve the efficiency and reliability of boiler operations, planned outages and plant safety. Team members have attended formal training sessions and have held meetings for employees to identify opportunities and solve issues that affect customers as well as employees.

The team members are also responsible for providing performance management feedback, coaching employees to apply the skills and knowledge learned in training, interpret operational data, view the organization as a total system and not just their individual jobs; and engaging employees to improve satisfaction, loyalty and retention.

The first wave of BPL kicked off in Saugus earlier this year and has consisted mainly of information gathering. The second phase will incorporate action planning and execution to drive results. Each year, refresher training will take place as needed, and an employee survey will be repeated. The process is intended to create an annual rhythm that will permanently change the way employees think about performance and improvement. The overall program is expected to reach 10,000 employees this year.

”

BPL is a way of investing in our employees' development and showing that we care about them.

David Steiner
Waste Management CEO

Wheelabrator
Saugus
Quick Facts

Operating since 1975, this landmark facility is the United States' first commercially successful waste-to-energy facility. The Saugus facility processes up to 1500 tons per day of municipal solid waste from Saugus and surrounding communities.

The shadows know

Saugus students experience Wheelabrator

BY MEAGHAN CASEY

Donning hard hats and safety vests, a trio of Saugus High School seniors experienced first-hand the environmental and engineering responsibilities at Wheelabrator Saugus.

The students participated in Saugus High's Shadow Day, which provides seniors with the opportunity to follow a mentor for the day and get a glimpse of a specific profession. The annual event faced a two-year lapse from 2006-2007 due to budget cuts in the school department. Wheelabrator campaigned to revive the program and financially support it through the Saugus Business Education Collaborative.

Students visited a variety of public and private offices, including Town Manager Andrew Bisignani, Solid Waste and Recycling Inspector Lorna Cerbone, the Saugus Police and Fire departments, Brigham and Women's Hospital, Rossetti Insurance, and other local businesses and organizations.

At Wheelabrator, seniors Jean Friend, Iva Kokoshi and Katie Guarino toured the facility, visiting the control room and witnessing the process of converting trash to energy.

The experience was eye-opening.

"I kind of knew about Wheelabrator, but I had never visited or been on

tour," said Friend. "I didn't know there were engineers here. I thought they just burned trash, but it's really very complex."

"I couldn't believe how much man-power it takes," said Kokoshi. "Everything that goes into it, it's more than meets the eye."

Friend and Kokoshi, who are interested in the field of engineering, shadowed Operations Manager Bill Hoen. Friend, vice president of the National Honor Society, hopes to pursue a degree in chemistry or chemical engineering next year, while Kokoshi will focus on mechanical engineering or physics.

"The first time I took chemistry, I was hooked," said Friend. "I like being able to fix things with limited supplies. I've always preferred the sciences."

"Just to know how things work is a fascination for me," said Kokoshi, who was born in Albania and moved to the U.S. nine years ago. She has excelled at Saugus High and currently serves as a peer mediator and vice president of Model United Nations.

Hoen reviewed the different engineering aspects of Wheelabrator's operations. With Kokoshi, he went over construction plans, while Friend had the opportunity to visit the plant's water lab.

"We talked about the options that are potentially out there for them, and they got a feel for some of the jobs they're interested in," said Hoen. "Hopefully they enjoyed the experience."

Guarino, who hopes to pursue environmental science, shadowed Bob Faia, director of environmental health and safety.

"I took environmental science as an elective last year, and basically became infatuated with it," said Guarino. "I kind of want to go into the law aspect of it, or health."

With Faia, Guarino learned about continuous emission monitoring, Massachusetts waste bans and what Wheelabrator does to protect the environment and provide a safe workplace for its employees.

"I think it's a great program, and hopefully a learning experience for them," said Faia. "Any chance to put them in the environment of a field they're interested in is very beneficial."



Operations Manager Bill Hoen chats with Saugus High student Michelle Mytkowicz and Saugus Solid Waste and Recycling Inspector Lorna Cerbone on Shadow Day at the plant.



Saugus High School students, from left, Jean Friend, Iva Kokoshi and Katie Guarino view monitors in the control room.



Operations Manager Bill Hoen shows Saugus High students how energy is made at Wheelabrator Saugus.



Saugus High School students, from left, Iva Kokoshi, Jean Friend and Michelle Mytkowicz listen to a presentation at the Wheelabrator Saugus Plant.



Control Room Operator Tom Rogers explains his role at the Wheelabrator plant to Saugus High School students on Shadow Day.



Saugus High students, from left, Katie Guarino, Iva Kokoshi, Jean Friend, Laura Mytkowicz and Michelle Mytkowicz are geared up for Shadow Day.



Saugus High student Michelle Mytkowicz and Saugus Solid Waste and Recycling Inspector Lorna Cerbone check out a boiler during a plant tour.

Unsung Heroes

Saugus students recognized by SBEC

BY MEAGHAN CASEY

Nine Saugus students were recognized this spring as Unsung Heroes by the Saugus Business Education Collaborative (SBEC) at a ceremony held at Prince Restaurant.

The students, representing each of the Saugus Public Schools, were honored during the fourth annual awards ceremony for their academic efforts and contributions to their school community. The award encompasses the following criteria: consistent/persistent academic effort, exemplary character, mature behavior, outgoing personality and good citizenship.

This year's Unsung Hero Award recipients included:

Shaun Viele, Lynnhurst Elementary School; Olivia Farmer, Oaklandvale Elementary School; Danielle Strangie, Waybright Elementary School; Edward Bukirch and Caroline Orlando, Veterans Memorial Elementary School; Catalina Sierra and Christopher McCarthy, A.J. Belmonte Middle School; and Daniel Freehling and Sarah Krasowski, Saugus High School.

Wheelabrator Saugus, represented by Linda Sapienza, SBEC board member and director of community relations for Wheelabrator Technologies, provided funding for the trophies and gift bags.

"These students are an asset to their school and to the community," said SBEC President Christine Wilson.



SBEC Chair Christine Wilson, front row, left, congratulated Unsung Hero award recipients: front from left, Edward Bukirch, Shaun Viele, Olivia Farmer, Caroline Orlando and Danielle Strangie; back row, from left, Catalina Sierra, Daniel Freehling, Superintendent Dr. Keith Manville, Wheelabrator Saugus Plant Manager John O'Rourke, Sarah Krasowski, and Christopher McCarthy.

Wheelabrator plays key role in reducing CO₂ emissions

CARBON FOOTPRINT: from Page 1

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 Saugus 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 greenhouse gas 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 greenhouse gases, i.e., 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 Saugus was responsible for the avoidance of approximately 370,000 tons of greenhouse gas emissions. Company-wide, Wheelabrator-operated waste-to-energy plants were responsible for avoiding the production of more than seven million tons of greenhouse gases.

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. 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.

Radebaugh back to where it all began: Saugus

RADEBAUGH: from Page 1

in Connecticut in the early 1990s.

"There are a lot of unique challenges at this plant and we needed someone with a strong engineering background," said O'Rourke. "I knew Dan would be a perfect fit. He could pick up the intricacies of this facility, come in and hit the ground running."

While the Saugus plant has maintained its original structure, improvements are also evident. Since its early years, Wheelabrator has introduced operational procedures, energy recovery technologies and air quality control systems that have established new standards for reliable design and safe operation.

"I think the biggest changes since I left have been in health and safety," said Radebaugh. "That's a huge plus and it's worked out well for the organization."

Radebaugh first heard about the job opportunities at Wheelabrator in the local news. He was living in Saugus at the time.

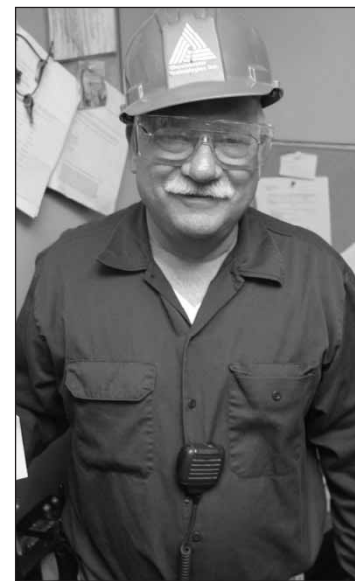
"Saugus was the first operating plant in the country," said Radebaugh. "I knew there would be equipment related to high-pressure boilers, but the operations were all new and different. It was quite interesting."

After eight years in Saugus, Radebaugh left as shift supervisor. From Saugus, he spent three years as operations manager at the Wheelabrator Westchester County, NY plant. From there, he joined Wheelabrator Millbury in 1986 in preparation for the plant's start-up in 1987. He was in charge of preliminary engineering and development before the plant went online.

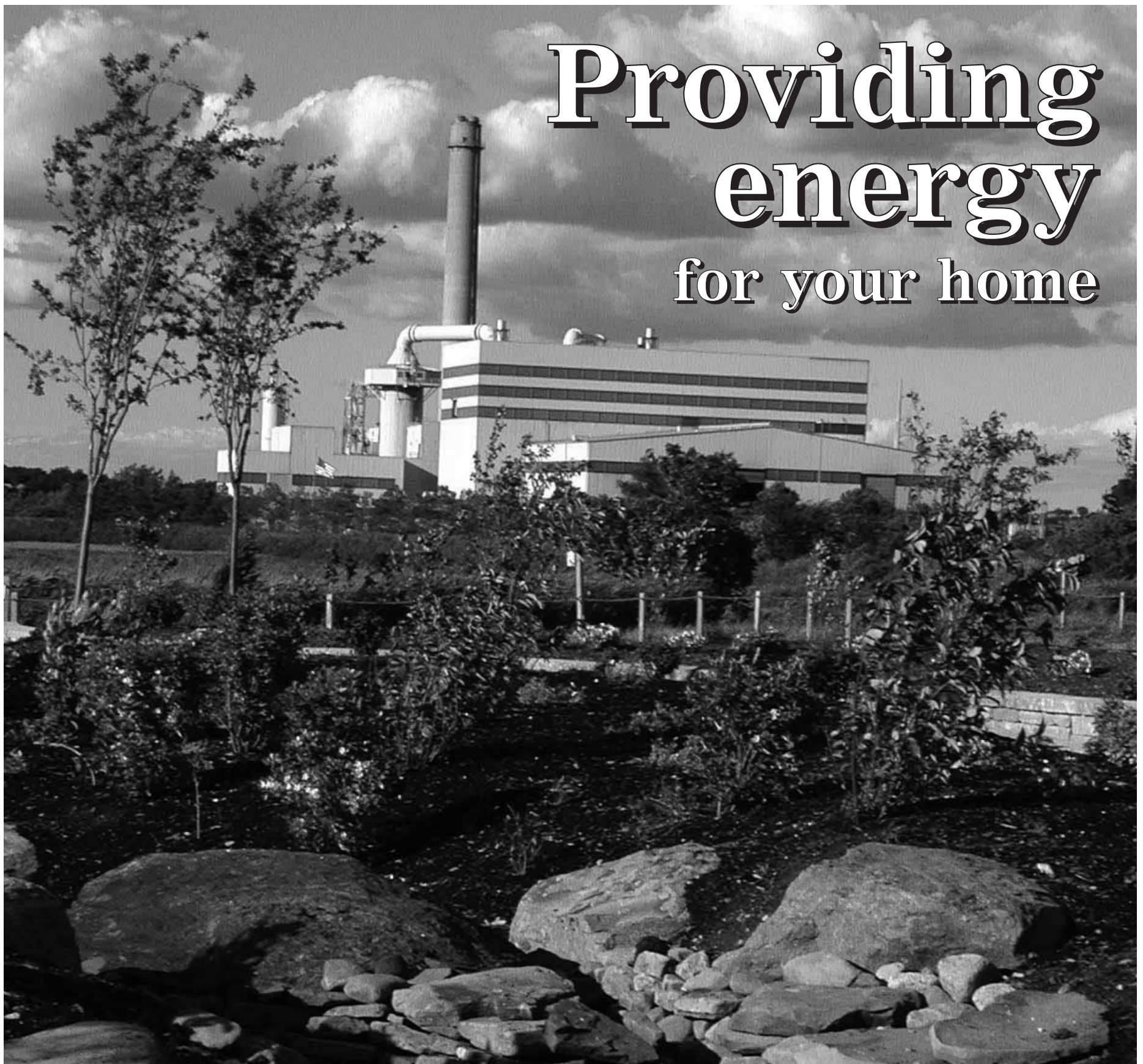
"It was great," said Radebaugh. "I learned a lot about the technical side of the business in Saugus, so I had the practical skills. The most challenging was trying to capture the understanding of the community and overseeing relations with the regulatory agencies."

After three years in Millbury, Radebaugh spent three years in Miami working for a resource recovery facility. He returned to Wheelabrator in 1992 as plant manager in Westchester. He spent three years in Westchester, and was transferred to the Bridgeport, Conn. facility as plant manager. From there, he moved to Wisconsin and worked for an independent power producer for five years before returning to New England and performing independent consultant work.

Radebaugh currently lives in Northwood, NH. A native Floridian, he relocated to Massachusetts after marrying his wife, Mardell, who was born and raised in Saugus. The couple, married for 39 years, met while Radebaugh was a patient at the Chelsea Naval Hospital. They have two sons, Daniel III and Allan. Daniel, diagnosed with cystic fibrosis, has inspired Radebaugh and his wife to become active in fundraising efforts for the local chapter of the Cystic Fibrosis Foundation, which has been the driving force behind the pursuit of a cure. Allan, the youngest, is a crane operator at Wheelabrator Saugus. Following in his father's footsteps, he joined the Wheelabrator family, starting out at the Broward County, Fla. plants and relocating to the Saugus plant eight years ago.



Dan Radebaugh was control board operator in 1975, when Wheelabrator Saugus opened.



Providing energy for your home

And a clean environment for theirs.

Preserving the environment has been part of the goal at Wheelabrator Saugus for the past 33 years.



Wheelabrator Saugus, J.V.

A Waste Management Company

EMPLOYEE PROFILE

Saugonian for life



Saugus has always been a place for Ed McCarthy to live and work

BY MEAGHAN CASEY

Whether on the baseball field or inside Wheelabrator's waste-to-energy facility, Ed McCarthy has made Saugus his lifelong home.

"My whole life I've been a Saugus resident," he said. "My wife's from Saugus and we wanted to raise our kids in Saugus. It's a nice town – familiar and convenient to work. I live two miles from the plant, so it's definitely an easy commute."

McCarthy serves as the day shift supervisor of operations at Wheelabrator Saugus. In that capacity, he is responsible for the basic day-to-day operations of the plant, including scheduling and pay roll for the labor department, preparing for outages and employee training. He joined Wheelabrator in 1997 as plant operator and relief shift supervisor. He advanced to shift supervisor in 2002, working 12-hour rotating shifts, and took on his latest role two years ago.

"I worked rotating shifts for 18 years, so switching full-time to the day shift was a big change," said McCarthy. "It's a whole new way of living for me, especially with three kids."

With his evenings free, McCarthy has more time to devote to his three sons, as well as the Saugus American Little League. He has coached his boys on various teams throughout the past 11 years. His youngest, Kevin, 14, and John, 9, are both actively involved this year. McCarthy is coaching John's team in the minor league and is serving as equipment manager for the whole league. His wife, Carol, is treasurer of the league.

"It's rewarding helping the kids and seeing them through it," said McCarthy.

McCarthy's oldest child, Patrick, is 16 and involved now with track and field. The father and son duo share a passion for running.

"We did a half marathon together back in February in Hampton Beach," said McCarthy.

McCarthy graduated from Saugus High School in 1987. He and his wife married in 1990. The couple has been continually active in the Saugus community. Carol is co-president of the PTO at Veterans Memorial Elementary School, and both parents have given their time to their son's schools.

As for his tenure at Wheelabrator, McCarthy praises the work environment and the people.

"I enjoy everyone I work with," he said. "It's a really good group of employees and a great company."

In the 11 years since his start date, he has witnessed significant improvements within the culture of the work site.

"It's a 100-percent turnaround in terms of safety since I started," he said. "It's nice to see employees come to me, looking for things and reporting on contractors. Company-wide, the emphasis on safety has become a number one priority."

Wheelabrator Saugus day shift supervisor Ed McCarthy is a lifelong Saugus resident.

