

## Watt DEP Is Doing to Amp Up NYC's Power

**W**ith recent federal mandates to treat portions of the water supply and to reduce nitrogen and wet weather discharges, DEP's electricity use is expected to increase by 53% in the next five years, and our total energy costs are expected to almost double by 2014. At the same time, all City agencies are tasked to meet the PlaNYC goals of reducing energy consumption and greenhouse gas emissions by 30% by 2017. So what can we do to reconcile these two realities?

Last month, DEP became the lead agency and the Mayor's principal advisor on the city's energy policy and planning efforts, including making investments in private energy infrastructure and working with energy regulators on issues affecting ratepayers. By combining the policy-making functions with DEP's capital investment planning experience, large as-



set base, and technical expertise in water, wastewater, and energy systems, the city will be in a better position to meet the energy needs and goals of the future.

To meet rising energy demand, there are numerous ways to take advantage of DEP's assets and processes to generate clean energy, including building hydropower facilities on our upstate reservoirs, cogeneration plants at our waste-

(Continued on reverse side)

## Spotlight on Safety

### Small Boat Safety

Operation and maintenance of the New York City water supply happens not only in DEP facilities on dry land but also on the many reservoirs and lakes that hold our most valuable resource. Bureau of Water Supply (BWS) employees routinely find themselves on the water performing tasks such as collecting water samples, deploying and maintaining turbidity curtains and booms, and performing wildlife studies. To keep BWS employees safe while working on the water, the bureau has recently launched its Small Boat Program.

The Small Boat Program provides uniform minimum stan-

dards for all BWS employees relating to safe boat operations, maintenance, inspection, pollution prevention, emergency preparedness, and training. For a new employee to become a "qualified small boat operator" they must receive: classroom instruction on the program requirements; hands-on field training in triling; launching, and operating boats; and finally, complete proficiency or "on the job training" requirements. With trained and qualified small boat operators at the helm of BWS boats, there should be nothing but smooth and safe sailing ahead.

## Commissioner's Corner

Today marks the 52nd edition of Weekly Pipeline—and the end of Volume 1, our first year of publication. Weekly Pipeline is designed to let you know the latest news from around DEP and the city; to highlight the incredible people and history of this agency and the services we provide; and to mark important milestones in the lives of our nearly 6,000 employees. I learn something new every week, and I hope you do too. I'd like to recognize the entire Weekly Pipeline team for their dedication and creativity, and for the endurance it takes to publish a high-quality newsletter every single week. Join me in congratulating everyone who has a role making our newsletter possible, including **Girma Moges, Helene Amato, Angel Roman, Samar Qandil, Karen Murphy, Athena Danalakis, Farrell Sklerov, Doreen Johann, Phil Young, Dave Ribeiro, Mercedes Padilla, Margot Schloss and Carl Ambrose**. And a special thanks to the managing editor who keeps all the moving parts in order, **Eileen Alter**.

More than just a newsletter, Weekly Pipeline is a record of DEP's challenges and accomplishments in 2010; and we've accomplished a great deal. BWS protected 11,709 acres of watershed lands in 2010—the most ever since the inception of the Land Acquisition Program in 1997; water main breaks dropped to their lowest level in more than a decade, demonstrating that BWSO's programmatic maintenance is paying off. And BWS achieved monthly Clean Water Act Standards at all 14 of our wastewater treatment plants for the first time ever. We also celebrated the 100th anniversary of DEP's Harbor Survey Program, which shows that the Harbor is the healthiest it's been at any time in the last century, and reached a historic settlement with the State, NRDC and environmental stakeholders that will reduce nitrogen discharges into Jamaica Bay by 50%.

For our customers, BCS launched a number of new initiatives, including: online wireless meter reading (AMR) so families can make smart decisions about their water



use; the Water Debt Assistance Program for DEP's most vulnerable customers; and paperless billing. All of these initiatives serve our customers better, one of **Mayor Bloomberg's** top priorities.

But 2010 was just as notable for the new goals we've set. After 10 years of painstaking study and preconstruction work, BEDC announced a plan to repair the leaks in the Delaware Aqueduct, which supplies more than half of the city's water needs. Our goal is to break ground on a tunnel bypass by 2013, an ambitious but achievable target. And the BEPA team developed the NYC Green Infrastructure plan that, as it is implemented, will beautify the city, improve air quality, and lower energy costs as it improves water quality in New York Harbor. In 2011, DEP will begin to implement the plan in earnest as we work to persuade our State and Federal partners that our plan—which would save \$2.4 billion of public funds—will achieve the best results.

These are just two of the challenges we'll tackle in 2011 and beyond. In the inaugural Weekly Pipeline I committed that DEP would release a Strategic Plan—and early next year, we will. The plan covers every aspect of DEP's operations, from water and air quality to sewer connection permits that businesses and developers need to keep New York City going. Everyone at DEP has an important role to play in the implementation of the plan, and I look forward to working closely with everyone to achieve the many goals it sets. As we gear-up for 2011, I want to thank each of you for your efforts in 2010 and wish you and your family and friends a healthy and happy new year.

At DEP, everyone is responsible for safety. If you or anyone on your team is concerned about your working conditions, it's okay to ask your supervisor or your bureau's EHS liaison how they can help. If you've still got questions, you can call the EHS Employee Concerns Hotline. It's DEP's responsibility to acknowledge and fix unsafe situations, procedures, and practices. With your help, we'll not only get the job done, we'll make it safer for ourselves, our coworkers, our families, and our city.

CALL (800) 897-9677 OR SEND A MESSAGE THROUGH PIPELINE. HELP IS ON THE WAY. 

## Focus on the Field



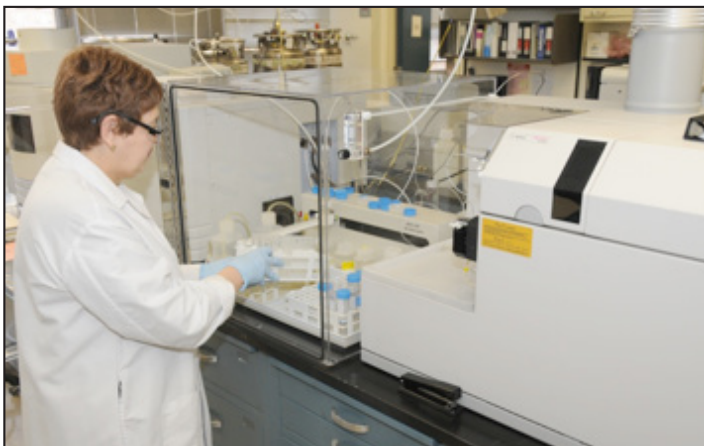
When he comes to work at the Coney Island Wastewater Treatment Plant each morning, Plant Superintendent **Ojpal Auluck** knows that he'll be responsible for treating the 90 million gallons of wastewater that pours into the plant each day. But in addition to this critical environmental responsibility, Ojpal is also working to make Coney Island the most energy efficient wastewater treatment plant in New York City. Thanks to his efforts, about 35% of the plant's electric energy is actually self-generated by utilizing the digester gas that occurs as a byproduct of the wastewater treatment process. The plant also makes extensive use of automation techniques to save around 15,000 KWH each month (the equivalent

of 625 light bulbs burning for eight hours a day). That means lower energy costs for DEP and a cleaner environment for all New Yorkers.

Before joining DEP in 1991, Ojpal gained significant engineering experience in India and North Africa working for British Electric International. When he moved to America, Ojpal was hired by DEP as a Stationary Electric Engineer and became Coney Island's Deputy Plant Superintendent in 1998. In 2004, he was promoted to Plant Superintendent and has been closely involved in plant upgrades, shutdowns, equipment testing, and personnel training ever since.

Ojpal notes that he is "proud of the work we do every day... for our ratepayers who rely on us to protect their health and the environment." Ojpal's hard work has not gone unnoticed. In 2008, The New York Water Environment Association presented him with the Uhl T. Mann Award for excellence in plant operation and maintenance. When he's not working, Ojpal enjoys practicing and teaching yoga, traveling, and spending time with his grandchildren.

## Did You Know



...that one of the most powerful tools in the DEP laboratory is the inductively coupled plasma paired with mass spectrometry (affectionately known as the ICPMS)? This laboratory instrument analyzes several metals at one time in water and has the capability of detecting at or below one microgram per liter. One microgram per liter can also be referred to as one part per billion, which is roughly equivalent to one drop in about 240 chemical drums, or three seconds in a century. Many of the tests performed by DEP's water quality laboratories are required to be this sensitive in order to meet State requirements and to ensure public health.

## Beyond New York



No, this is not a photo of the digester eggs at the Newtown Creek Wastewater Treatment Plant. These egg-shaped digesters are in Bottrop, Germany and part of Emschergerossenschaft Kläranlage, a wastewater treatment plant that is located at the Emscher River. As part of the sewage treatment process, these egg-shaped structures break down the organic solid matter in the wastewater. Compared to their more conventional cylindrical counterparts, the egg shape structures make this process more efficient, and require less energy, maintenance and space. With additional processing, the by-products are turned into fertilizer and the digesters also generate biogas that contains methane that can be used to power the facility.

### (Watt DEP Is Doing to Amp Up NYC's Power... continued)

water treatment plants (WWTPs) that will use anaerobic digester gas produced at the plants, and wind and solar power facilities on WWTPs and closed landfills, where DEP performs remedial activity. Consistent with PlaNYC's goal of expanding the city's power supply, DEP will also support expanding the city's natural gas infrastructure. As Energy Regulatory Affairs Director **Mike Delaney** says, "DEP is ideally positioned to think creatively and boldly about how to meet the city's future power needs, even in the face of our current budget realities."

Even at DEP we are finding ways to cut down on our energy use. For the past five years at the Coney Island WWTP, 90-95% of the anaerobic digester gas (ADG)—that might otherwise be wasted in a flare—has been used to power the engines and boilers, significantly minimizing fuel oil consumption. The combination of using ADG and reducing fuel oil consumption significantly

decreases DEP's greenhouse gas emissions. Since July 2010, Tullman Island WWTP has been using only two blowers instead of three, due to the installation of more efficient diffusers, saving approximately 700 gallons of fuel oil per day. Other measures such as operating HVAC fans at the lower speed setting, and installing timers and motion sensors for WWTP lighting, have helped to slow the rate of growth of electricity demand.

DEP will continue to tap into the vast knowledge and field expertise of its employees to continue to meet the energy challenges and goals. As **Sergej Mahnovski**, Director of the Office of Strategic Planning that includes the new energy team, explained, "We have a unique opportunity to scale up some of the most innovative ideas in clean energy, energy efficiency, and demand response to help the city meet its ambitious energy goals."

## Kudos Corner

DEP issued 104 press releases in 2010. This number not only reflects the hard work done by the Communications Office—especially Press Secretary **Mike Saucier**—it also reflects the great job all the bureaus do, which makes highlighting them so much easier.

**We welcome your feedback! To submit an announcement or suggestion, please email us at: [newsletter@dep.nyc.gov](mailto:newsletter@dep.nyc.gov)**