

DEP Looks to 'C'ensor CSOs

As temperatures continue to drop this winter, it's hard to imagine kayaking in the Hudson, fishing in Jamaica Bay, or relaxing on the city's beaches. But, warm weather will be here soon and over the last 10 years DEP has invested more than \$10 billion towards improving harbor water quality and ensuring that New Yorkers can enjoy these outdoor activities. In fact, the overall health of our waterways continues to improve to levels not seen in more than a century.

But there is always more work to be done, especially tackling the hundred-year-old challenge of combined sewer overflows (CSOs). Like many older cit-

ies across the country, much of New York's sewer system is designed to convey wastewater from homes and businesses, along with stormwater collected in catch basins, in a combined pipe to treatment plants. Although the system can handle twice the dry weather flow, during heavy storms the system can reach its capacity and must discharge a mix of stormwater and wastewater.

This past fall, DEP completed installation of remote sensors at five CSO outfalls to collect real time data and better evaluate the effect of CSOs on New York Harbor water quality, respond to developing emergencies, en-

(Continued on reverse side)

Spotlight on Safety

Indoor Air Quality

Ninety percent of our time is spent indoors, and for many of us, that includes working in an office. Indoor air quality affects the health, comfort, wellbeing, and productivity of building occupants and it was also one of the most frequently cited areas of concern in the 2012 DEP Employee EHS Survey.

Indoor air quality involves a constantly changing interaction of complex factors including building ventilation systems, air exchange rates in a specific space, moisture and humidity, pollutants or odors (including strong colognes or perfumes), and occupant perceptions and sensitivities. Even everyday activities like heating food in a microwave and using the photocopier can generate nuisance odors or pollutants. Indoor air temperature can also affect comfort levels.

The good news is that even though there are numerous factors that

affect indoor air quality, most of them can be prevented or controlled. Some things that everyone can do to prevent indoor air quality concerns are:

- keep air vents unblocked
- dispose of garbage promptly and properly
- be respectful and understanding of colleagues
- store food properly

Maintaining good indoor air quality in DEP's offices is dependent on the cooperation of everyone. There are occasions where building HVAC systems are unbalanced and may need to be adjusted. If you have concerns about building ventilation systems or indoor air quality in general you should speak to your EHS representative or bureau facilities coordinator.

For more information see: [An Office Building Occupant's Guide to Indoor Air Quality](#)

Commissioner's Corner

Every day DEP employees work to ensure that future generations of New Yorkers will have an adequate supply of high quality drinking water and that New York Harbor is clean and healthy. Last week we announced two major milestones in this important work. First, DEP has completed installation of new technology at the Hunt's Point Wastewater Treatment Plant that will reduce nitrogen discharges by nearly 40 percent.

Nitrogen is a naturally occurring element found in organic materials and is present in wastewater when it enters our treatment plants. Because nitrogen poses no threat to human health, the treatment plants were never designed to remove it. However, research shows that high levels of nitrogen can degrade the ecology of a waterway by reducing levels of dissolved oxygen and promoting excessive algae growth, especially in warm months. The new technology at the Hunts Point Plant converts the organic nitrogen in the wastewater into inert nitrogen gas that is released harmlessly into the atmosphere. A second, \$8 million phase of the upgrade at Hunts Point will result in a total reduction of nitrogen discharges of 70 percent by 2016. We are also investing an additional \$770 million in nitrogen reduction measures at the Bowery Bay, Tallman Island and Wards Island treatment plants. And, \$500 million is being invested in similar upgrades at the Jamaica Bay and 26th Ward treatment plants.

Second, on the Water Supply side, we announced that site preparation work will begin this month on the Rondout-West Branch Bypass Tunnel, a roughly \$1 billion project that will repair leaks in the Delaware Aqueduct. One of our top construction priorities, the project will create good jobs for residents of the Hudson Valley, and it will ensure that New York City



continues to have a safe and reliable water supply system for decades to come. The Rondout-West Branch Tunnel—a section of the Delaware Aqueduct that runs from Rondout Reservoir to West Branch Reservoir—is a critical component of the New York City water supply system. The 85-mile Delaware Aqueduct conveys more than 500 million gallons of water each day—approximately half the city's drinking water—and it also serves about one million residents of Orange, Putnam, Ulster and Westchester Counties.

The site work and bypass construction will create roughly 160 jobs for local tradesmen and women and it will save the city between \$16 million to \$23 million over the duration of the project. The Rondout-West Branch Tunnel repair is central to DEP's "Water for the Future" program, a \$2.1 billion initiative to both repair the Delaware Aqueduct and upgrade other parts of the city's water supply system. It is also part of *Strategy 2011-2014*, the far-reaching strategic plan that outlines 100 distinct initiatives to make DEP the safest, most efficient, cost-effective, and transparent water utility in the nation.

In addition, last week I visited the Catskill/Delaware UV Plant where construction is almost complete and testing of the systems is underway. These are just some examples of the forward thinking and exciting projects our agency is working on to help ensure a bright future for all New Yorkers.

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



Ensuring that DEP's 14 wastewater treatment plants operate 24/7 and treat the more than one billion gallons of wastewater produced in New York City every day requires a skilled staff to maintain the biological, chemical, mechanical and electrical systems. Native New Yorker **Mike Parente** has been a Sewage Treatment Worker at the Wards Island Wastewater Treatment Plant for the last 19 years, where he has done everything from welding and plumbing to rebuilding pumps, motors, and compressors. On any given day he may be found working in the plant's repair shop, at a grit chamber, or even at the bottom of a 20-foot deep tank that can hold a million gallons of wastewater.

As he sees it, most people don't fully understand the wastewater treatment process or appreciate the amount of work that goes into ensuring that New York Harbor stays clean and healthy. Parente's problem-solving nature thrives on new challenges and he notes, "I like to work on all the pumps and motors and understand how the entire plant functions. I welcome the opportunity to learn something new every day."

Parente's previous background and experience have helped contribute to his success. Prior to joining DEP he had spent more than 10 years as a plumber—first with a private company, and then with his own business. Before that, Parente worked with his father, a boilermaker, at the Brooklyn Navy Yard maintaining US Navy vessels. "Mike is a 'go-to guy' and a 'clutch player,'" said Wards Island Plant Chief **John McCabe**. "Mike is able to think outside the box to come up with a better and more efficient way to accomplish a task."

In his spare time, Parente enjoys working around his house but also notes, "I relish the chance to spend time with my family and watch football."

Did You Know



...that there is a nationwide organization called the Select Society of Sanitary Sludge Shovelers? The honor of being conferred with Society membership is recognized nationally and internationally by the Water Environment Federation, as well as trade associations and professional societies. The "shovel" is a badge worn on a members left breast pocket.

Counted amongst the Select Society of Sanitary Sludge Shovelers are DEP Sewage Treatment Workers, Plant Superintendents,

Engineers, Assistant Commissioners, Deputy Commissioners and a former Commissioner.

Kudos Corner



DEP VOLUNTEER DAY SUCCESS: The first in a series of 2013 Staten Island Volunteer Day Bluebelt cleanups was held this past Saturday, January 19, in Midland Beach. More than 25 people volunteered to participate in this successful event, including DEP staffers **Martha Osenni** and **Joseph Osenni**, and family and friends they recruited to participate. More than 125 bags of trash were collected from the site during the four-hour event. A passport and a property deed were among some important personal items recovered during the cleanup and they are now being returned to their owners. Thanks to the BWSO Bluebelt Unit and the BCIA Marketing Team for organizing these important cleanups of DEP's Bluebelt areas.

If you are interested in participating in an upcoming Staten



Island Bluebelt cleanup event, we are accepting volunteers for January 26, February 9, February 23, March 16, and March 30. Please email DEPVolunteerDay@dep.nyc.gov with your preferred date(s) to sign up. Space is limited for the January 26 event. If you are interested in participating this coming Saturday, please RSVP by 5:00 pm Thursday.

(DEP Looks to 'C'ensor CSOs... continued)

hance the existing public notification system, and guide future capital upgrades.

The new sensors will complement the 108 sensors previously installed at combined sewer outfall locations, many of which are located near recreational areas. The older sensors do not detect the rate or direction of flow, making it hard to distinguish CSOs from tidal effects and extremely difficult to quantify exactly how much CSO is occurring at a given time. The new sensors will do both, giving DEP data to improve our CSO models and quantify the environmental impact of heavy storms.

"We hope these sensors will help us make targeted investments

to reduce CSOs in the most cost-effective way," said BWT Deputy Commissioner **Vincent Sapienza**. "By understanding which outfalls have the greatest frequency and volume of CSO, we can focus our infrastructure upgrades and produce the greatest benefits for harbor water quality."

The first five sensors were installed at locations across the city, including near the Brooklyn Navy Yard, in the Dutch Kills tributary to Newtown Creek, and on the Bronx River near Soundview Park. DEP is planning to add three additional monitoring sites in the near future at additional outfalls leading into the Hudson River, the upper East River, and Jamaica Bay.

We welcome your feedback! To submit an announcement or suggestion, please email us at: newsletter@dep.nyc.gov