

A Letter from Commissioner Emily Lloyd

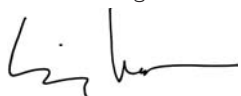
When I was appointed DEP Commissioner by Mayor Bloomberg, I was proud to join an agency known for its dedicated staff and its tremendous accomplishments in delivering clean drinking water and in preserving the environment and quality of life for New Yorkers.

I've started learning about the major issues facing DEP—such as the construction of the Croton filtration plant, our Nitrogen reduction program for wastewater treatment, the environmental health and safety compliance program, and City Water Tunnel 3 and its shaft sites. I've also been able to visit a few facilities and had the unexpected opportunity to see how we handle a major water main break. While it's only been a few weeks, it's clear that DEP's responsibilities are critical, complex, and intertwined.

I'm looking forward to getting to know you at field visits and meetings over the next few months. Meanwhile, I wanted to let you know a little more about myself. I join DEP after serving at Columbia University, first as Executive Vice President for Administration, then as Executive Vice President for Government and Community Affairs. I've spent much of my career in public service, and was proud to serve as Commissioner for the Department of Sanitation under Mayor David Dinkins. I also served as Director of Business Development at the Port Authority of New York and New Jersey, and as Commissioner for Traffic and Parking for the City of Boston.

DEP is a remarkable agency—we have an ambitious capital plan to upgrade and expand our facilities, revenue and program management supporting that effort, and a sweeping environmental health and safety program to help us operate responsibly every day. I look forward to seeing more of DEP in action over the coming weeks as we work together to fulfill our responsibilities to nine million New Yorkers in the City and its watersheds.

With best regards,



DEP Pursues Innovative Nitrogen Reduction Program to Improve Harbor Water Quality



*Inside DEP's
PO-55 Research Facility
at the 26th Ward WTP
in Brooklyn*

The waters surrounding New York City have enjoyed a dramatic revitalization over the past 30 years. Significant public investments have been made by the City in wastewater management, and as a result, aquatic and bird species have grown in numbers and diversity, public beaches have been less affected by water pollution, and recreational use of the harbor has soared.

While progress has been remarkable, there have been calls to further improve the Long Island Sound, which experiences seasonal low dissolved oxygen in its deeper waters. Dissolved oxygen levels are an indicator of the health of a water body—low levels can harm fish and shellfish populations. The Long Island Sound Study (LISS), a joint federal, state, and

local initiative, determined that discharges of nitrogen into the sound contributed to this problem. LISS adopted a phased fifteen-year strategy, composed of five-year targets for nitrogen reduction, to address this issue. It focused on the upper East River, and included the Hunts Point, Tallman Island, Wards Island, and Bowery Bay Wastewater Treatment Plants (WTPs).

Although DEP supports the initiative, it has been a significant challenge for the department, as the City's WTPs were not originally designed to remove nitrogen compounds, such as ammonia, from sanitary sewage. Traditional methods for upgrading WTPs to remove nitrogen, called Biological Nutrient Removal (BNR), (Nitrogen Reduction, continued ...)

Bureaus Work Together to Conserve Water at the Brooklyn Navy Yard

Water conservation is always a priority for DEP, regardless of whether the City is experiencing drought conditions. Over time, DEP's conservation efforts have included toilet rebates and flow regulators for household appliances, but the question remains, how can DEP continue to expand its conservation efforts as these existing programs become institutionalized? To address this issue, DEP is developing innovative and integrated strategies for reducing water use, bringing the Agency's considerable resources to bear throughout the City and finding recent success at the Brooklyn Navy Yard.

The Navy Yard is a 300-acre industrial complex, housing more than 200 businesses

that employ over 3,000 people. It is also one of the City's largest consumers of water: Fifteen metered service lines serve the Yard, and, historically, they had provided inconsistent measurements of the facility's water consumption.

Reviewing the Yard's water charges, the Bureau of Customer Service determined that an extensive review of its water use was needed. BCS's Confined Space Crew visited the location and read the 15 underground meters over a 24-hour period to obtain an average daily flow.

BCS metered the amount of water entering the property as well as the amount reaching the (Water Conservation, continued ...)

DEP Establishes Environmental Health & Safety Hotline for Employees

In 2003, DEP launched its Environmental, Health & Safety (EHS) Employee Concerns Program. The program, administered through the Office of Environmental, Health & Safety Compliance, was established to allow employees to report concerns relating to environmental, health and safety issues and to identify and prevent the harassment and intimidation of co-workers who make such reports. Although DEP encourages its employees to discuss any work concerns, including EHS problems or issues, with their supervisors, it has also instituted an EHS Hotline, (800) 897-9677, to provide another option for raising such issues.

The EHS Hotline operates through the use of a toll-free telephone number which is accessible to DEP upstate and in-City employees. DEP employees may call the hotline 24-hours a day, 7 days a week to report environmental, health and safety questions, concerns or problems. In addition to calling the voice mail box, employees may

address written complaints to the Office of Environmental, Health & Safety Compliance/ Employees Concerns Program (at Lefrak).



FDC David Tweedy presents the first EH&S "Serious About Safety" Awards: (l to r) Frank Ivone (BWT), FDC Tweedy, Michael Mitts (BWSO), Timothy Kelly (BWS), William Cadellina (BWSO), and Robert Bye (BEE). (Not pictured: Robert Miller, BWS.)

The program was specifically set up so that employees who wish to report environmental, health or safety issues may choose to identify themselves or to remain anonymous. Hotline or written communications are treated as confidential and are always inves-

tigated for follow-up or corrective action, as appropriate. Resolution of a complaint may include taking action at a facility to correct or improve conditions that led to the complaint. Since it established the EHS Hotline, DEP has handled and successfully resolved a variety of employee complaints, including environmental issues at facilities, such as lack of heat and air quality issues.

DEP employees may continue to contact the Agency's Federal Monitor, A. Patrick Nucciarone, with any complaints or concerns they have about EHS issues, at (888) 875-4800 or (732) 280-4800. However, as we endeavor to make improvements to our EHS program, employees are encouraged to call the Hotline and help demonstrate that DEP is capable of taking care of employees' concerns without fear of hassles, harassment, or intimidation.

You can find additional information on the OEHS web page on DEP's Intranet, "Pipeline," located at <http://pipeline>.

* A longer version of this piece runs in the March 2005 edition of V.I.E.W.S., DEP's quarterly Environmental Safety & Health Compliance newsletter.

(Water Conservation, continued ...) buildings within it, discovering that 75% of the water was being lost before it reached its destination. BCS then contacted the Bureau of Water and Sewer Operation's Leak Detection Unit for assistance in detecting leaks within the property's internal network of piping. In addition, the Bureau of Wastewater Treatment's Collection Facilities Engineering Section assisted in inspecting the premises, hiring scuba divers to check for leaks along the waterfront.

This collaboration between DEP's different bureaus led to reducing the Navy Yard's total consumption by half—over 500,000 gallons of water a day!



(Nitrogen Reduction, continued ...) involve construction of additional batteries of large treatment tanks.

Since virtually all of the City's WTPs are surrounded by communities, there is little space to build on additional land. Construction and land-acquisition costs would be enormous using conventional methods—by some estimates, as high as \$11 billion.

Given all of DEP's other responsibilities, this level of funding would have been very difficult to provide. In order to identify possible ways to achieve the same reductions in nitrogen without such high levels of investment, DEP launched a substantial research and development initiative to evaluate alternative, innovative treatment processes.

DEP began experimenting at the Tallman Island WTP, where modifications to the existing treatment tanks were made to test whether "retrofit" systems could remove nitrogen from sanitary sewage. The results of the work were promising: nitrogen discharges were reduced by nearly a third. Advancing this cost-saving technology, which could be done within existing plant footprints, became

an objective of the Agency's research program.

In the late 1990s, DEP constructed an applied research center, known by its contract name, PO-55, at the 26th Ward WTP in Brooklyn. The facility has been the site of numerous experiments to assess different strategies' performance and costs. Several of these BNR processes were subsequently tested at full scale at one or more of the City's WTPs, and those that proved successful were integrated into the designs for the plants' upgrades.

DEP's applied research program has won the American Council of Engineering Companies' Grand Award for Excellence in 2001, as well as the Association of Metropolitan Sewerage Agencies' 2003 National Research and Technology Award for the top research program. It also earned international notice when featured in a cover story in Engineering News Record. Such recognition is further proof that DEP's applied research program is providing an innovative and cost-effective solution to a critical environmental problem facing New York's harbor waters.

In February, Water Environment Federation President-Elect J. Michael Read presented WEF's National William Hetfield Award to Maria Bizzoco, on behalf of her late husband, Mike Bizzoco, former Coney Island WTP Superintendent.