

A Letter from Acting Commissioner Tweedy

Working with Commissioner Ward for the past two years has been a tremendous honor. With his departure, Mayor Bloomberg has asked me to serve as DEP's Acting Commissioner. As 2005 begins, I believe that we, as an Agency, have an opportunity to continue and increase the momentum that we have built over the past two years.

One of our primary goals will be the strengthening of our Environmental Health & Safety (EH&S) program. DEP will continue to implement and formalize EH&S policies, conduct inspections, and offer employee training, in order to ensure the safety of our employees, facilities, and the general public. Toward this end, I have also launched the monthly "Serious about Safety Award" program to reward employees for their individual achievements in promoting EH&S compliance. More information on this program can be found on both the EH&S and Commissioner's pages on DEP's intranet, *Pipeline*.

In 2005, construction will begin on the Croton Filtration Plant. Not only will this help ensure high-quality drinking water for New Yorkers, but building the plant within City limits will provide a number of benefits: increased business for local merchants, an increase in local employment opportunities, and a focus on the participation of minority- and woman-owned businesses. Recently, DEP has opened a community office at the project site, to provide outreach and information for the public. In addition, throughout the year, the Mayor will be announcing the groundbreaking of numerous Bronx Parks projects, funded by DEP's contribution of \$200 million.

Having seen DEP at work, I am sure of our success in the months to come. It continues to be a privilege to work here with you, and I am excited by our prospects in the coming year. I wish you the best in 2005.

Sincerely,



David B. Tweedy
Acting Commissioner

Board of Water Supply Turns 100!



The New York City Board of Water Supply

Seated, left to right: Merrit H. Smith, Deputy Chief Engineer; J. Waldo Smith, Chief Engineer; Robert Ridgway, Department Engineer. Standing, left to right: Walter E. Spear, Thaddeus Merrimen, Alfred D. Flinn, Carleton E. Davis, Frank E. Winsor, Department Engineers. January 1912.

This year marks the 100th anniversary of the creation of the New York City Board of Water Supply—the agency that would later become today's Department of Environmental Protection—and the initiation of planning for the Catskill and Delaware water supplies.

In honor of this, DEP will be initiating a year-long celebration and educational campaign. Today the Catskill/Delaware System provides 90% of the City's drinking water and is protected by an EPA-designated Filtration Avoidance Determination, the hallmark of the City's historic Watershed Memorandum of Agreement.

DEP Prepares for the Future: The Dependability Study

New York City's drinking water comes from a vast system of surface reservoirs and controlled lakes located outside its borders. The City's original reservoir system, the Croton, is located in Westchester County and today it supplies approximately 10% of the City's drinking water. As the City continued to grow, engineers looked further upstate to supplement its water supply, drawing water from the Catskill and Delaware watersheds. The infrastructure that carries drinking water from these watersheds to New York City has been in operation for decades now, without ever having been taken offline in any major way for inspection or repair.

We know that the Delaware Aqueduct is leaking at the rate of 30 million gallons per day between the Rondout and West Branch Reservoirs. While investigations by the Automated Underwater Vehicle (AUV; see *DEP Digest Volume 1, Issue 2, on Pipeline* for more information) revealed that the aqueduct re-

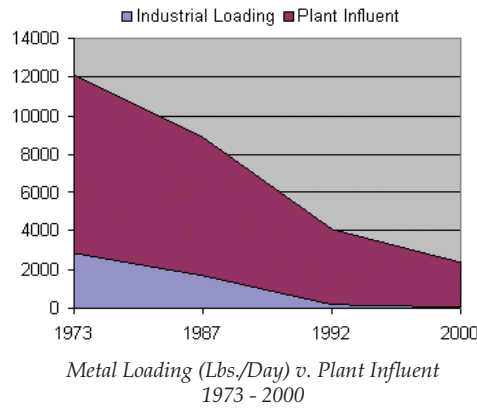
mains in good condition, we recognize that ultimately repair will need to be made. If the Aqueduct is taken offline for repair, the City will lose access to four reservoirs in the Delaware watershed: the Rondout, the Pepacton, the Neversink, and Cannonsville; these reservoirs represent almost 50% of the City's drinking water supply. BEE is currently leading an effort to determine how one major component of the water supply system can be taken out of service for repair, and yet ensure that there is a sufficient supply of drinking water for the 9 million consumers in the City and upstate communities.

To answer this question, DEP recently initiated a contract for Facility Planning and Program Management Assistance for the Water Supply Dependability, intended to develop a plan to allow DEP to take critical system components out of service one at a time for inspection and repair, and still meet demand require- (*Dependability, cont'd...*)

The War Against Metals: DEP's Industrial Pretreatment Program

The Bureau of Wastewater Treatment's Division of Pollution Control and Monitoring identifies and eliminates discharges and hazards that can have an adverse effect on the City's wastewater treatment plants or their receiving waters. Such hazards can cause clogs or corrosion in the City's wastewater infrastructure and interfere with the sewage collection system or treatment processes. Ultimately, these materials can end up in either the City's biosolids or in the effluent discharged into the City's harbors. One of the City's most effective means of reducing these hazards is BWT's Industrial Pretreatment Program (IPP).

DEP has been collecting information about the many pollutants—heavy metals, organic and inorganic chemicals, and other toxins—that are discharged from industrial sources into the City's sewers since the early 1970s. With 1973's passage of the Clean Water Act, the federal government began



to regulate and monitor industrial pollutants more comprehensively, determining national discharge limits and requiring the City to report its findings.

Today, DEP's IPP regulates over 300 Significant Industrial Users (as well as over 200 additional "Non-Significant" Users) that are subject to federal, as well as local, standards

regarding sewer discharges. In the City, regulated facilities often house metal etching, electroplating, inorganic chemical, drum recycling, or paint manufacturing industries. DEP issues permits to these facilities and conducts random, unannounced inspections to determine their compliance with discharge regulations. Should these facilities fail to comply, DEP is authorized to issue Notices of Violation (NOVs) and can compel a violator to develop and follow a compliance schedule. In FY03, IPP inspectors issued close to 1,800 NOVs.

Since 1973, the total discharge of metals into the City's sewer has dropped by two-thirds, from over 9,000 pounds per day to 2,900 pounds per day. An even larger achievement has been DEP's ability to reduce the discharge of metals from industrial sources from over 2,800 pounds per day to under 100 pounds per day—a reduction of over 95 percent.

(Dependability, cont'd ...) ments. In the early 1990s, system dependability originally focused on conservation and demand reduction, such as low-flow toilet rebates, fire hydrant locks, and leak detection and repair. While these strategies are still employed, the City's aging infrastructure warrants a strong focus on system redundancy.

As DEP's dependability study has advanced, it has come to focus on looking for solutions in both the short term and the long term. Short-term planning will ask the question, "What can be achieved quickly and cost-effectively to guarantee the sufficiency of the City's water supply?" It will focus on further demand reduction, maximizing the use of our existing reservoirs, and examining the City's current infrastructure to see how it can be adapted to increase supply. DEP is looking at a number of alternatives in this regard, including pressurizing the Catskill and New Croton Aqueducts to increase their carrying capacity and examining the possibil-

ity of increasing the height of the Ashokan and New Croton Reservoirs' spillways to increase reservoir storage capacity.

Longer-term dependability planning will explore options that include water tunnel construction and development of alternative drinking water sources. Chief among the plans for alternative sources is BWSO's current Aquifer Storage and Recovery (ASR) project, which is exploring the uses of aquifers located under Brooklyn and southeastern Queens. By injecting surplus water from the upstate surface reservoirs into the aquifers under Long Island, the City would then draw from this resource as a temporary supplemental drinking water source during periods of drought or long-term repairs. Strategies for accessing alternative drinking water sources may also include interconnections with neighboring water supplies, such as those in New Jersey and Long Island, or the desalinization of brackish surface or seawater.

DEP has contracted with Camp Dresser and McKee and Hazen & Sawyer, PC, as a joint venture, to perform a two-year study of the most viable options for improving the redundancy and capacity of the system. Since pursuing multiple solutions will reduce risk and uncertainty, DEP will begin planning for multiple projects simultaneously, helping to ensure that the Agency will be able to meet projected future shortfalls. To this end, DEP has already allotted millions of dollars in its 10-year capital plan to begin full-scale planning for several of the facilities that will ultimately be recommended by the study.

This year, as we commemorate the 100th anniversary of the establishment of the Board of Water Supply, DEP is investing in the future of the water supply, taking steps to ensure that the century-old foundation of the City's water supply is secure for another 100 years, and guaranteeing future generations will never have to wonder what will happen when they turn on their taps.



DEP Donates Vehicles to Tsunami Relief

DEP will donate two catch basin clearing trucks from BWSO, one backhoe from BWS, and one bulldozer from Fleet Services to assist in the relief and rebuilding efforts in nations affected by the Indian Ocean tsunami in late December 2004.

Worthy of Note

- In October 2004, **Thomas Mills** (BWS) and **Joseph Wisneski** (Fleet) were both selected for Environmental, Health and Safety awards. Thomas won the Environmental Recognition Award, and Joseph won the Environmental, Health, and Safety Award.
- DEP's December Blood Drive collected almost 250 pints.