

## Air We Go! BEC Lab Keeps Tab

New Yorkers burn more than one billion gallons of heating oil every year, which adds more soot pollution to the air than all the cars and trucks in the city combined. These and other pollutants contribute significantly to lung and heart conditions while exacerbating others like asthma. But things have been getting better. On Earth Day 2007, **Mayor Bloomberg** released PlaNYC, the city's sustainability blueprint that included the ambitious goal to "achieve the cleanest air quality of any big U.S. city" by the year 2030. Since PlaNYC was issued, the city has made significant strides toward achieving that goal and dealing with air pollution.

Progress in addressing harmful air emissions from heat and hot water boilers and burners is underway. There are new local laws and rules



to phase out the use of the "dirtier" polluting types of fuel oil—No. 6 and No. 4 fuel oils. The 10,000 residential and commercial buildings with furnaces that burn these grades of oil in New York City produce significantly higher levels of particulate matter, sulfur dioxide, nitrogen ox-

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## Spotlight on Safety

### Injury/Illnesses Record Keeping

In FY 2011, DEP recorded a total of 296 "recordable" injuries, which OSHA defines as an injury or illness that results in any of the following:

- Death
- Days away from work
- Restricted work or transfer to another job
- Medical treatment BEYOND first aid
- Loss of consciousness
- A diagnosis by a physician or other licensed health care professional

OSHA's requirements are not only a recordkeeping exercise; they assist employers in identifying workplace conditions which may lead to additional injuries if not addressed. A Pennsylvania company was recently fined \$288,000 by OSHA for not maintaining their worker injury

records and not properly certifying their accuracy on an annual basis.

There is a mistaken belief that if you can still perform the job even after receiving medical treatment, then the injury need not be reported or recorded. We are all responsible to report any and all injuries to supervisors, EHS Officers and/or timekeepers so that accurate records can be maintained. In cases where medical treatment or first aid was administered, it is important to provide accurate and thorough information about the specifics of the injury itself as well as the treatment received. OEHS assists the bureaus in the annual process of gathering, checking and certifying the information. In a future Spotlight on Safety, we will discuss exactly what constitutes a recordable injury and what you need to report and record. For more information, click here.

## Commissioner's Corner

Over the past four months, we have given periodic updates in Weekly Pipeline about Operational Excellence (OpX) and the progress we have been making in improving our delivery of services. From our two-day kick off meeting, through brainstorming sessions in our operating bureaus to field visits, the OpX program is in full swing and has been bringing together our employees and consultants to develop and implement new ideas.

We launched OpX to bring our world-class organization to the next level. As anyone who has worked at DEP knows, our agency has a proud tradition of always striving to do better and be at the cutting-edge of water and wastewater operations. Now we're able to draw upon Veolia's international experience with like-sized utilities as we seek to streamline workflows, boost productivity, identify opportunities for efficiency gains, and keep future water rate increases as low as possible—all while maintaining our high environmental and customer service standards.

Since the program started, the OpX team, made up of both DEP employees and consultants, has hit the ground running. They have already assessed all major DEP facilities, interviewed more than 200 DEP staff, conducted more than 20 workshops, and observed more than 600 hours of work. The response from DEP professionals in every bureau has been both welcoming and extremely informative, helping to generate and refine ideas that will be incorporated into the program.

Even though Phase 1—the evaluation and recommendation phase that will result in a final report due in the next few months—isn't yet complete, we already have some early cost-saving initiatives that have either already been implemented or are about to be that I wanted to share.

**Chemical Procurements:** Our agency uses chemicals to ensure the quality of our drinking water and the protection of our environment. After the OpX team performed a detailed analysis of what other utilities pay for chlorine and fluoride specifically, we noticed that the prices we have been pay-



ing did not reflect today's market. In a joint effort between BWS, ACCO and DCAS, we immediately went back to our providers with our findings and they agreed to reduce our rate to better reflect what the market dictated. That alone saved \$750,000 annually. While a good first step, this is just the beginning of how we will rethink our procurement strategy. Ultimately we expect to have an open bid for chemical providers so that we get the lowest cost for our customers.

**Vehicle Maintenance:** A diverse agency like ours that responds to emergencies and covers countless square miles is very dependent on our fleet. Proactively minimizing vehicle breakdowns and follow-up repairs is a priority, but we also should do it in the most effective way possible. After reviewing what other similar-scale agencies like the MTA do, we have decided to change light- and medium-duty fleet maintenance from a 120 to 180 day cycle—a step that should not affect overall vehicle performance. This not only immediately saves money, but it also frees up our mechanics to better focus on our heavy-duty or specialized vehicles so that they can get back out into the field as quickly as possible. The estimated cost savings for this initiative is \$400,000 annually. This will also provide further benefits to the operating bureaus as their employees spend less time transporting vehicles to and from the repair shop and more time accomplishing their core mission.

**Sludge Thickening:** We have also discovered an opportunity to reduce costs by optimizing our sludge thickening process. Solids that are removed during primary and secondary treatment are first stored in sludge thickeners, which simply use gravity to let the remaining liquids stay on top while solids (which still have a high liquid content) settle to the bottom

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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



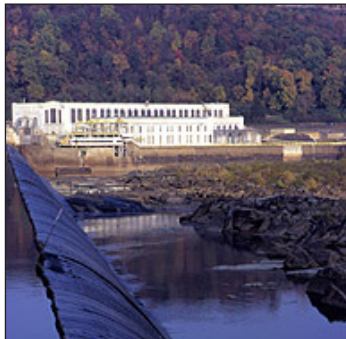
In 1986, DEP hired the first four asbestos inspectors—including **Leonard Atteloney**—and for the last twenty five years Leonard has been at the forefront of innovation at the Bureau of Environmental Compliance (BEC). By 1988, Leonard was promoted to director of an in-house asbestos laboratory, which he had developed. For the last eighteen years, he has served as the Director of Lab Services for BEC.

As Director, Leonard is responsible for the smooth operation of the Asbestos and Hazardous

Materials laboratories. Some of the most important functions of BEC's laboratories include conducting monitoring and chemical analyses, which can be presented in legal proceedings against violators in state and federal court as well as the Environmental Control Board. Leonard is presently working with the Department of Health and Mental Hygiene to develop a data management system that could be used in emergency incidents to share analytical data to the necessary city, state, and federal agencies quickly and efficiently. "I most enjoy working with my fellow co-workers, both in the lab and in the field," Leonard said. "I like to know that in our small way we are protecting the citizens of New York City from unnecessary exposure to toxic pollutants."

When not protecting us all from hazardous materials, Leonard is an avid soccer fan. He spends his free time coaching his son's soccer team and refereeing youth soccer leagues in Queens and Long Island.

## Beyond New York



The Holtwood Hydro Power Plant on the Susquehanna River near Lancaster, Pennsylvania is undergoing a \$434 million expansion by adding 125 megawatts of generating capacity to more than double output of the existing 108 megawatts. When completed in 2013, the plant's extra capacity would provide enough renewable electricity to supply 100,000 typical homes. The Holtwood plant has been generating clean, renewable electricity using the flow

of the Susquehanna River for over 100 years. It uses a 55-foot-high dam across the Susquehanna River between the Pennsylvanian cities of Lancaster and York.

**ANNUAL ART AND POETRY CONTEST:** NYC and watershed teachers (and parents) are invited to enter their students in DEP's annual Water Resources Art and Poetry Contest. For contest guidelines and other information, click [here](#). DEP's Art and Poetry Contest provides 2nd -12th grade students with an opportunity to express themselves creatively about our shared water resources.

**DEP Blood Drive:** Lefrak, 3rd Floor Cafeteria; high-rise building: 3/13-3/15, 7:45 am to 1:30 pm; Downsview Fire Dept.: 3/7, 9:00 am to 2:00 pm; Kingston, 51 Albany Avenue: 3/12, 1:00 pm to 5:30 pm; Grahamsville Parking Lot: 3/14 – 3/15, 10:00 am to 3:00 pm. Please click [here](#) to see the email from the Commissioner, and [here](#) for the list of blood captains.

## Press Box

**LAND BEFORE TIME:** "State Museum researchers are part of a team of international scientists who reported Wednesday the discovery of the world's oldest forest, about 385 million years old, near the Gilboa Dam in Schoharie County." – from a Times Union article [on](#) an ancient forest uncovered while DEP was conducting extensive repairs to the dam

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ides, and carbon dioxide than other energy sources, such as No. 2 fuel oil or natural gas.

Starting July 1, new rules will require building owners using No. 6 fuel to switch to cleaner No. 4 fuel oil or an equivalent when renewing an expiring boiler certificate. There will no longer be a renewal of No. 6 oil allowed. Since there is a three-year permit renewal cycle, all buildings using No. 6 are expected to be in compliance by July 2015. Furthermore, by 2030 all buildings with boilers will be required to use No. 2, natural gas or fuel that is equivalent in emissions to No. 2.

In October there are two additional fuel oil advancements planned. The first is for No. 4 fuel and it will be a requirement that sulfur content in the fuel has to be lowered from 3,000 to 1,500 parts per million. Also, in the same month, as the result of the cooperative efforts of the administration and the City Council, all Nos. 2, 4, and 6 heating oils are required to contain at least 2% biodiesel by volume. Both of these fall under Local Law 43. New York State is bolstering the city's efforts as well and in July, all No. 2 heating oil sold for use in the state must not have a sulfur content greater than 15 parts per million. Penalties for non-compliance range between \$350 - \$6,000.

In anticipation of the new regulations, **Manoj Oza** from DEP's Bureau of Environmental Compliance's

Air Lab recently assisted in the effort to expand its in-house capability to streamline the turnaround time of getting lab results. The lab tests are required to ensure that the heating oil being burned is consistent with the sulfur requirements in the law and is free of illegal additives. To ensure compliance with the new rules, DEP inspectors will be able to take even more field samples than they had previously, and have them analyzed more quickly. Instead of contracting the work to an outside lab, DEP has been certified to analyze the heating oil samples. Additionally, in September 2011 the lab acquired new equipment, an X-ray fluorescence spectrometer to be used in analyzing oil samples for sulfur content and other possible illegal substances. As **Leonard Atteloney**, the lab's director explains, "a spectrometer measures substances present in a sample. For example, if a higher than expected metal content is found it would indicate the presence of an illegal additive in the fuel oil such as automotive waste oil or another inferior oil."

For **Gerry Kelpin**, Director of the Air and Noise Enforcement and Policy Unit, "The set of improvements for the fuel oil used in New York City boilers is a significant milestone that we are undertaking to improve our air and the city's health." For New York City residents, the improvements mean we will be able to breathe easier about taking a breath of air!

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before being pumped into digesters. Maximizing the solid content of what is pumped to the digester can be achieved relatively simply by increasing settling time and making the pump time shorter but more frequent. This will trigger a domino effect for cost savings: reduced energy needs for the digester process; reduced volume of chemicals needed during dewatering; and decreased costs for solids transportation and disposal. To test the idea out, we are starting a pilot project at 26th Ward and will see in the coming months how

well it works and how it can be expanded to the other treatment plants. Overall, we believe this will result in roughly \$500,000 in yearly savings just from one plant.

The total savings of these and other quick wins is between \$8 and \$9 million annually. They also are a good representation what OpX is working on: maintaining our standards but in a smarter and more efficient way. Remember, if you have a good idea, you can still submit it at <http://pipeline>, as many of you have already done.

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