

Cease the Grease: DEP's FOG Program Helps Keep NYC Sewers Running

With more than 22,000 food service establishments serving more than eight million New Yorkers, plus all the tourists and commuters that come into the city every day, sometimes things get flushed into the sewers that shouldn't! Both food establishments and households discharge wastewater containing fats, oil, and grease (FOG) into more than 7,400 miles of New York City public sewers. FOG can build up in the sewer by adhering to its pipes, restricting the normal flow of sewage. Clogged sewers can cause sewage backups, unsanitary conditions, and flooding as well as damage to personal and public property creating a health hazard, unpleasant mess, and expensive cleanup costs. Based on EPA's data, a national aver-



age of 40% of sewer backups are caused by grease clogging the sewers.

DEP's Bureau of Water & Sewer Operations has a program that flushes and cleans the sewer system based on patterns of 311 complaints, which is one com-

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Spotlight on Safety

A New Way of Looking at EHS Compliance!

One of the goals of the DEP EHS Strategic Plan is to "Measure EHS Performance and Demand Success." That is a tall order indeed! One of the strategies to meet this goal is to approach and conduct EHS compliance audits in a new way. The Office of Environmental Health and Safety (OEHS) in conjunction with the EHS Auditing Committee have charted the course for this new initiative. Under the leadership of **Gerould McCoy** (OEHS) and **Charlene Graff** (BWS-EHS Director), this new audit program is taking shape. And with collaboration from **Karen Marino** (BWSO-EHS), BWSO is the first bureau to be a part of it. This new agency level assessment program is not primarily based on a checklist type inspection that generates a list of "findings," but

is designed to help facilities and bureaus identify contributing factors, causes, systems or practices that might be the underlying root cause for the EHS findings. One of the ways this is achieved is by incorporating a representative sample of employee interviews as part of the new EHS assessment. Interviewed employees are not identified by name in any of the assessment reports, but the collective information garnered in the interviews is effective to determine how well DEP's EHS programs are integrated and understood at the facility and operational level. A good EHS program does not exist only in DEP's written policies and procedures, but more importantly in the day to day thinking and practices of all DEP employees and contractors

Commissioner's Corner

On Wednesday, **Mayor Bloomberg** delivered his tenth State of the City address at the St. George Theater in Staten Island. Under the banner "Progress at Work," the Mayor outlined the difficult economic choices that New York City faces. He noted that the city entered the recession later than the rest of the country, and is emerging sooner—we are leading the way in job growth, and we have trimmed costs by \$5 billion over the past three years. But many families continue to struggle, and we must close massive budget gaps this year and in the future.

The Mayor stressed that we won't meet these challenges by raising taxes, or abandoning infrastructure investments needed for our city's future. Instead, he laid out a strategy to "continue transforming our economy into a more diverse, more dynamic, and more durable engine of growth...[by] transform[ing] the way government serves the public and the way it spends the public's money." Read the full text of the Mayor's speech here. DEP is critical to the success of these efforts.

For example, the re-zonings spearheaded by City Planning Commissioner **Amanda Burden** have enabled projects like the redevelopment of Coney Island and Jamaica, and the Economic Development Corporation, led by President **Seth Pinsky**, is leading the middle-income development project in Hunters Point South. Water and sewer infrastructure are critical to the success of these projects. The Mayor also talked about the NYC Green Infrastructure Plan, and how it will save \$2.4 billion over the next 20 years—as long as we get the State and Federal approvals we need to implement it. But we're not waiting to get started—the Mayor announced that we'll launch a Community Grant program, so local residents can help us make investments that are right for their neighborhoods.

On behalf of DEP's customers, the Mayor asked "why shouldn't homeowners know when they have a leaky water pipe that's running up their water bill?" The answer is that they should. Thanks to the 835,000 wireless meters that we are installing, DEP will soon launch a leak notification program to alert customers



when their water use deviates significantly from the norm. And with recently-launched initiatives like paperless billing, DEP is improving services and cutting costs. As the Mayor said, "Government should make it easier to live and work in New York, not stand in the way."

After the State of the City, I stopped by our Staten Island Customer Service Center. Under the leadership of BCS Borough Manager **Janice Segman** and her team, we are consolidating the office so that BWSO's Staten Island plan review unit and BCS are in the same building—creating one-stop shopping for contractors and property owners who need permits. And yesterday, I met with our three newest wastewater treatment plant superintendents to congratulate them and talk about the challenges of their demanding new roles. **John Ahern**, now in charge of Tallman Island, began his career at DEP in 1981 as an oiler and most recently served as Deputy Superintendent at Wards Island. In 2008, John received NYWEA's Uhl T. Mann Award for excellence in wastewater operations. **Peter Zeppa** is the new Superintendent at Rockaway. Peter started with DEP in 1982 as an electrician's helper, and has held several positions at treatment plants and in collection facilities, most recently as Deputy Superintendent at Rockaway. **Nitin Patel** is the new Superintendent at Oakwood Beach. He started with DEP as a Sewage Treatment Worker in 1994, and was subsequently promoted to Stationary Engineer and Senior Stationary Engineer. I also want to thank retiring superintendents Larry Brincat (Rockaway) and Joe Garibaldi (26th Ward) for their many years of dedicated service. Congratulations and thanks to all!

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



Anyone who is able to catch **Paul Kiskorna** in action will see someone who seems as comfortable looking at wet well elevations on a computer monitor as he is with his crew inspecting the regulator to a combined sewer outfall. Paul is a Stationary Engineer Electric at Collection Facilities Operations (CFO) in the Bureau of Wastewater Treatment. Headed by its Chief **Jerry Volgende**, the CFO division operates and maintains wastewater pumping stations, interceptors, regulators, and combined sewer overflow retention facilities.

Based at Collection Facilities North (CFN) in the Tallman Island Wastewater Treatment Plant, Paul starts his

day by checking the status of equipment such as pumps and feeders, and tracking any reported problem conditions. **Kevin Buckley** manages CFN, which is responsible for ensuring that sewage flows smoothly to the Bowery Bay and Tallman Island wastewater treatment plants.

Paul began his work in 1988 at the Red Hook Wastewater Treatment Plant in Brooklyn, and after 18 years there he transferred to his current position. Although it has been a highlight of his work at DEP, the change was also challenging. In addition to learning the locations of the many pumping stations, regulators, and tide gates and how they work, he needed to see each location during different conditions. Paul remarked, "The system works differently during torrential rain, than in a dry, bright summer day. We have seen instances during heavy rain when a tide gate is open and timbers can float back into the system. Now I get to see all the material that can find its way to the plant." For Paul, work is always interesting and he gets to see beneath city streets, which is a vantage point shared by very few people. During his spare time, Paul likes to travel.

Milestones

Best wishes to **Michael Frank**, BWT, who is retiring on January 28 after 39 years of service.

Congratulations to **Lawrence Macina**, BWS, and his wife **Jessica** on the birth of their son **Jack** on December 29, 2010.

Kudos Corner

Following Mayor Bloomberg's call to action to prevent a blood supply shortage throughout New York City, numerous city agencies did their part in addition to efforts at DEP that netted 51 pints of blood. City Hall, with the assistance of the Departments of Housing Preservation and Development, Cultural Affairs, Parks and Recreation, Consumer Affairs, Buildings, the Housing Authority and NYC Media, collected 83 pints from 100 donors in less than 48 hours.

Press Box

"Of all the civilizing advances of 19th-century New York—rapid transit, electricity, elevators, skyscrapers—water was and is the most critical. Turn off the tap on water for drinking, for washing, for cooking, for flushing, and our high-rise city will empty out nicely." — NY Times article on the history of the Croton Reservoir

HOPE 2011:

Volunteer for the Homeless Outreach Population Estimate (HOPE) count. On Monday, January 31, join thousands of volunteers as they canvass parks, subways, and other public spaces to count the number of people living unsheltered in the city. Dedicating one night will help us collect vital information that is used by outreach teams to help homeless people leave the streets and work toward a better life. Register to volunteer!

Did You Know

...that restaurants may produce two different types of grease? Yellow grease is typically used-frying oils from deep fryers, whereas brown grease is all the other fats and oils that wash down the drain and are collected through grease interceptors that are part of the plumbing system.

It's estimated that the United States produces approximately three billion gallons of yellow grease per year or nearly 10 gallons per person. Yellow grease that is recovered has reusable qualities, and has traditionally been used to spray on roads as dust control, as animal feed additive and used in the manufacture of soaps and textiles.

Recently, it has become a raw material for biodiesel production. Although most biodiesel is produced from renewable plant sources, yellow grease is attractive because it is inexpensive and a more sustainable product as it converts waste into fuel. Biodiesel also is a cleaner burning fuel source in vehicles than regular petroleum products. NYC recently passed a law requiring that biofuels make up at least 2% of fuel used for heating.

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ponent of the solution. The other component is DEP's Grease Remediation Program within the Bureau of Wastewater Treatment. The Grease Remediation team's primary function is to enforce the city's sewer regulations. A section in the regulations requires certain types of businesses to install and maintain grease interceptors, which are devices that separate grease from wastewater before it gets into the sewer system. The regulations also specify how large the interceptors must be and their periodic maintenance. Interceptors must be cleaned so that grease build up does not cause them to exceed their rated capacities.

The team inspects about 3,000 food service establishments per year and checks their interceptors for proper sizing, installation, and maintenance. Inspections are prioritized based on complaints to 311, referrals from BWSO's Sewer Maintenance unit, or are targeted in areas of the city that have chronic grease issues. DEP also receives periodic updates of food service establishments from the NYC Department of Health & Mental Hygiene to determine where there are new restaurants that need to be inspected.

Enforcement action may include the issuance of a Commissioner's Order, requiring a food service establishment to take corrective action within a specified time limit, and/or the issuance of Notices of Violation (NOV) for not complying with the regulations. Monetary penalties can range

from a few hundred dollars to a maximum of \$10,000 per day for egregious violations.

In addition to enforcement, the team also does outreach to explain the importance of keeping FOG out of the sewer system. "We inspect restaurants for compliance, but also educate owners about the interceptors, which can avoid costly sewer backups for them," said **Pravin Patel**, Chief of BWT's Compliance Engineering Section and manager of the Grease Remediation team. His team distributes literature—available in five languages—and holds public meetings to discuss the control of grease.

As food service establishments become more aware of the regulations, the number of NOV's issued by the team has decreased over time. For instance, in 2008 DEP issued 1,468 violations. That dropped to 818 in 2009, and even further down in 2010 to 717. "Since the implementation of the program several years ago, the level of cooperation and compliance has gone up. Thousands of grease interceptors have been installed or upgraded, and lots of grease that would have entered the sewer system is now either being recycled or disposed with solid wastes," said Patel.

DEP also has educational material targeted to residents so that everyone can follow good practices regarding the proper disposal of grease. Please click here for tips on proper grease disposal.

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