

Michael R. Bloomberg, Mayor Carter Strickland, Commissioner

April 17, 2012

WEEKLY



SONAR, So Good for Sewer Surveys

1985, Madonna married Sean Penn, the Titanic was discovered, Pete Rose broke Ty Cobb's career base hit record, Nintendo and "Back to the Future" were released, and the Kansas City Royals won the World Series. It was also the year that Terrance Brock ioined DEP as an engineering work study trainee. Since that year, Terrance has risen through the ranks to his current position as unit chief of the Survey Investigation Unit in the Bureau of Water and Sewer Operations (BWSO). The Survey Investigation Unit, part of the Capacity, Management, Operation, and Maintenance (CMOM) Compliance Section, comprises engineers and inspection personnel who investigate complaints of sewer back-ups (SBUs) that cannot be resolved by



BWSO maintenance crews. They also trace sewer connections for DEP, other agencies, and outside engineering companies in order to identify sewers and interconnections that may not appear on existing maps.

(Continued on reverse side)

Spotlight on Safety

Bloodborne Pathogens: What Are They?

Bloodborne pathogens are microorganisms that are carried in the blood and other human body fluids that can cause disease in humans such as Hepatitis B, Hepatitis C, and HIV \mathcal{O} .

Potential workplace exposure to bloodborne pathogens occur from accidents, administering first aid, post-accident clean up, and removal of waste products. Needle sticks and other sharps-related injuries can also expose employees to bloodborne pathogens. Occupational exposure is usually the result of direct contact of blood with an open cut or abrasion on the skin, the eve, mouth, nasal membrane or a needle stick. It is important to note that exposure of intact skin to blood or other bodily fluids does not cause disease, but all contact should be avoided and any affected areas should be carefully washed and/or disinfected.

In order to reduce or eliminate the hazards of occupational exposure to bloodborne pathogens, DEP has established a Bloodborne Pathogens Policy. Most DEP employees do not have regular tasks that might expose them to blood or other bodily fluids, but employees engaged in certain aspects of sewage treatment work and administration of first aid are at a slightly greater risk.

Employees in those groups are covered under a specific "exposure control plans" which clearly outline work controls, universal precautions, PPE and exposure incident procedures. Any employee that is exposed to human blood or other bodily fluids should report the exposure immediately to their DEP Safety officer so that the incident can be evaluated and addressed as needed. DEP employees should never engage in post-accident clean ups where blood or other potential bodily fluids are present. If in doubt, always contact your safety representative or OEHS.

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.

Commissioner's Corner

One of DEP's most critical functions is ensuring the safety and security of our drinking water supply, including our 2,000 square mile watershed and its vast infrastructure network. For this, we rely on the dedication and vigilance of our 201 Environmental Police Officers (EPO), and last Friday I was honored to preside over the graduation ceremony which admitted 26 new members to their ranks.

The work of an EPO is multi-faceted, and to be prepared graduates completed 31 weeks of intense instruction in counterterrorism, the environment, police science, the use of firearms, and defensive tactics, while completing courses in environmental conservation law, land navigation, fish and wildlife, and watershed protection. As we saw all too clearly last August during Hurricane Irene, these officers not only maintain the day-to-day security of our water supply-they fulfill a vital mission with a record of saving lives, assisting with search and rescues throughout the watershed at the height of the storm and in the days, weeks and months of its aftermath.

During the ceremony at the Ulster Performing Arts Center in Kingston, several officers were awarded for their outstanding performance in training. Jeremy Arcaro of Orange County received Best Overall Officer Award; Scott Hogan of Dutchess County received the Firearms Proficiency Award; Olivia Pullman of Ulster County received the Physical Fitness Award; and Orange County's Nicholas Schust received the Academic Proficiency Award. Joining them in graduating were Victor Bonadonna (Westchester); Stephen Davis (Delaware); James Dipietrantonio (Westchester); Malcolm Fowlkes (Bronx); Andres Gomera (Bronx); Matthew Knoetgen (Delaware); Amrit Maharaj (Suffolk); Lauren Mendizza (Staten Island); Joseph Mercorella (Westchester); Michael Messina (Dutchess); Ralph Miller (Queens); Kylee Pappas (Westchester); Zachary Petrowsky (Sullivan); Matthew Rosenstein (Brooklyn); Pasquale Santucci (Westchester); Catherine Sass (Nassau); Bradley Sherburne (Delaware); Christopher Sorano (Westchester); Daniel Szeto (Brooklyn); Ivan Tejada (Manhattan); Brandon Velez (Bronx); and Daniel Wahl (Delaware).



Congratulations to the new officers and their families. (

On Wednesday, DEP was included in what can truly be described as an "Only in New York" event. A water fountain designed to replicate the NHL Stanley Cup was unveiled in Times Square to kick off the Stanley Cup Playoffs with the theme that "everything tastes better from 'The Cup'" - including our world-class NYC Water, which we dispensed to pedestrians throughout the week. I joined NHL Commissioner Gary Bettman, NBC Sports Chairman Mark Lazarus. and former star players such as Clark Gillies (4 Stanley Cups with the New York Islanders) Adam Graves (Stanley Cup with the New York Rangers) and Grant Marshall (Stanley Cup with the New Jersey Devils) to toast the start of the playoffs with a cup of the world's best drinking water and to welcome hockey fans from around the world. I pointed out that DEP provides New Yorkers with a championship supply of drinking water: it's healthy, it's affordable, it's green and it's convenient. It's great to have championship water, but as I told the fans in Times Square, it is our hope that we'll see the Stanley Cup in New York again later this year.

Like most winter sports, hockey of course depends on water, and sustainability issues are of critical concern to organizations like the NHL. Winter sports are affected by climate change, and their future viability is dependent upon comprehensive efforts to both monitor and analyze climate change and to mitigate its environmental impacts (). DEP is also doing its part to lower our carbon footprint, particularly by repairing piping, roofs and flares in our digester gas systems; replacing old equipment with more energy efficient installations; and investing in infrastructure that enables the beneficial reuse of anaerobic digester gas.

Focus on the Field



If there is a water main or a sewer emergency around the city, Raymond Pollio will know it right away. That's because he keeps a tab on all necessary supplies DEP keeps in store for field operations to be able to fix a pipe or sewer without affecting the city's residents for too long. As District Supervisor of Central Services for the Bureau of Water and Sewer Operations, Raymond is in charge of all items including plumbing supplies, machinery, safety equipment and other mission critical materials that are needed for a job to be completed quickly and to help keep the city running smoothly.

Along with six other DEP employees, Raymond is responsible for almost 3,500 items on hand to keep servicing the city. "We supply between 45 to 90 pieces a day," he said. Being at DEP for 21 years, his non-stop routine starts at 7:00 am and includes coordinating with Field Operation units, DEP plumbers and contractors who are working at locations where a water main or a sewer job is underway, doing inventory and spending a lot of time on the phone with vendors and suppliers. "My normal day is extremely busy, we run many service and repair contracts and the phone does not stop ringing so it gets hectic here," said Raymond.

As a detail oriented person, Raymond has a handle on every material requisition and facilities work order request that comes through Central Services General Storehouse in Brooklyn. The words maintenance, repair, and contracts are constants in his vocabulary. When he is not ordering new equipment or moving materials from one place to another, Raymond is always trying to make sure the work is done well and on time so it does not become a major crisis. "We care about getting the job done right away and doing it in a safe way because you feel proud when you finish your workday," he said.

The father of two children, ages 8 and 6, Raymond loves to spend time with family, mainly outdoors playing sports. "Being with my family means everything to me," he said.

Ask Carter

askcarter@dep.nyc.gov

Q. Have you always been an environmentalist?

A. I have always liked being outdoors. I was raised in upstate New York and spent winters skiing and summers fishing and swimming in the St. Lawrence River. Later I became an avid hiker, exploring the Catskills, Adirondacks and other mountains. I'm happy to say that my children and spouse enjoy those activities too, so I get out into the woods whenever I can. Professionally, it has been important to me to protect resources for future generations, and to ensure long-term support for environmental issues by taking pragmatic steps to improve the environment. DEP is the greatest place to realize these goals, and I count myself lucky to be able to work with everyone here.

SO LONG: After nearly five years with the agency, DEP is losing Press Secretary and newsletter headline writer extraordinaire **Mike Saucier** to the lure of the sunny southwest. Mike's last day is Friday, April 20. His headlines set the table, so to speak, for your enjoyment of the feature stories that followed, and we are listing below our top five favorites:

- 5. K-9 Units Gives Criminals Reasons to "Paws"
- 4. Reservoir Operators Show they Con-du-it, and Do it Well
- 3. Sleuth Crews Use Clues to Seek Leaks
- 2. Land Acquisition: Its Go Go Go for H20
- 1. They're G-r-r-r-ate! Catch Basin Crews Storm City's Drains

Kodak Moment



TROUT TRACE: DEP fisheries biologist **Tom Baudanza** was part of a Kodak moment last summer on the upper Esopus Creek. Tom is holding a radio frequency receiver/data logger and tracking antennae manufactured by Advanced Telemetry Systems. Trout were surgically implanted with temperature-sensitive transmitters and this gear was used to monitor trout movement rates to better understand habitat preference and use of thermal refuge areas both above and below the portal on the Esopus Creek. This was a cooperative project with Cornell University, NYSDEC, USGS, Cornell Cooperative Extension of Ulster County and Trout Unlimited.

(SONAR, So Good for Sewer Surveys... continued)

The CMOM Compliance Section was created in response to a United States Environmental Protection Agency guideline to address sanitary sewer overflows and SBUs. One of the CMOM Compliance Section's duties is to examine, inspect, and evaluate areas of the sewer system designated as chronic based on a historic number of SBU complaints or areas that have recently undergone cleaning and had a recurrence of an SBU. CMOM represents a paradigm shift from a reactive to a proactive approach that prioritizes preventive cleaning and repair of chronic SBU locations to resolve problems before they impact DEP's customers.

The Survey Investigation Unit is currently working with the Interceptor Improvement Section of the Bureau of Wastewater Treatment to extend the use of SONAR technology in sewer analysis. Prior to this, sewers were analyzed by either closed circuit television (CCTV) or by visual observations made directly by field staff. For more than 20 years, Terrance was part of the unit that would descend into the sewers to walk them, looking for irregularities that would explain SBUs. In situations where the sewers are too small for a person to walk through, CCTV cameras are lowered into the sewer on flotation devices to take video of the sewers. While these cameras have a 360-degree rotation, they are unable to see below the murky sewer water. SONAR technology, on the other hand,



uses sound waves to document the level of sedimentation beneath the water's surface. The use of SO-NAR, coupled with CCTV, will provide a more comprehensive view of sewer segments, and lead to faster and more efficient resolutions by the CMOM team.

In his role, Terrance spends about 80 percent of his time on the administrative side of the table, ensuring that the data collected from sewer analysis is quickly and correctly routed to the responsible parties within DEP. However, Terrance fondly remembers the first time he encountered a school of eels while examining sewers in the Throgs Neck region of the Bronx. "All of a sudden, I looked down and was shocked to see these watery snakes slither past my feet," he said. "Thankfully, I was wearing my personal protective equipment, or I would have given myself a concussion because I jumped up so fast."

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