

On Sludge Vessel, DEP Interns Find Smooth Sailing



DEP summer interns recently spent the day on a Sludge Boat tour and experienced a very different side of DEP. After winding through the North River Wastewater Treatment Plant, the interns loaded onto the MV Red Hook, the city's newest sludge boat. This boat, like other DEP sludge boats, is responsible for transporting sludge, the diluted organic solids

removed during the treatment process, to other wastewater facilities for dewatering. Dewatering is the process of separating most of the water from the solids. There are usually two or three sludge boats running at a time, the largest of which is capable of carrying up to 150,000 cubic feet of sludge.

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Spotlight on Safety

Adjusting to Global Harmonization

Under the move by the Occupational Safety and Health Administration (OSHA) to adopt the Globally Harmonized System (GHS) into its Hazard Communication Standard, Material Safety Data Sheets (MSDS) are now called Safety Data Sheets (SDS).

The old MSDSs contain information about types of chemicals, their compositions, first aid measures, emergency response instructions, handling/storage guidelines, and other important information. For anyone using a particular chemical, it also provides safety and health information. OSHA's Hazard Communication Standard exists to ensure that employees are aware of and understand the hazards associated with

the chemicals they work with. Under the standard, employers are required to keep a directory of MSDS.

Although the content of the SDS is very similar to the MSDS it replaces, the SDS requires that physical, chemical and safety and health information follow a standardized format. Also, some chemicals at the workplace which previously were not regulated are now considered hazardous under a new definition and therefore require new SDSs.

Employers are required to comply by June 2015 with the revised Hazard Communication Standard, including the new safety data sheets.

Visit OSHA.gov for additional information.

Commissioner's Corner



Nearly one year ago, the strength of DEP staff and operations was tested by the unique challenges of Hurricane Irene and Tropical Storm Lee. Along with bringing record rainfall to the New York City watershed, these storms brought devastating effects to upstate communities as they destroyed roads, downed trees, and flooded neighborhoods. DEP plays a vital role in the communities of Delaware, Greene, Schoharie and Ulster Counties. Working together and strengthening our relationships with upstate partners, DEP was able to meet the challenge of recovering from these storms' aftermath—a process that is still ongoing to this day.

Last Thursday, I traveled to Gilboa to view firsthand the critical recovery work being performed by DEP in conjunction with local authorities. After meeting Deputy Commissioner **Paul Rush**, Shokan Regional Manager **Carl Davis** and Deputy Chief **Jeff Helmuth**, Program Director for Water for the Future **Sean McAndrew** led us on a tour of the reconstruction efforts at the Gilboa Dam. We were also joined by Town of Gilboa Supervisor **Anthony Van Glad**. We also stopped by the DEP Police Precinct 1 in Gilboa and met up with Captain **Brian Handy**, Sgt. **David Dorio**, Sgt. **Dave Hunt**, and Officer **Matt Knoetgen**. As many may recall, there was a brief period during Hurricane Irene in which DEP lost contact with BWS staff at the Gilboa Dam, and it was Captain Brian Handy who arrived on scene to confirm the structural stability of the dam during this time. However, much work remains to ensure its continuing reliability

and strength, and DEP is doing everything possible to prepare for future contingencies. I thank Sean McAndrew for guiding us through this process, and for the continuing work of his team to repair this vital infrastructure.

After viewing the work at Gilboa Dam, we drove to the Town of Prattsville to visit Devasego Park on Route 7. Joined by Town of Prattsville Supervisor **Kory O'Hara**, we saw just how much can be accomplished through a productive working relationship with local partners. Devasego Park is now a vibrant, scenic recreational site for residents and visitors alike. What was once a scene of debris and devastation following Hurricane Irene is now a park where families hike, picnic, boat, and walk their dogs. In fact, in a clear demonstration of making the best of unfortunate circumstances, trees that were knocked down by the storm's winds were reclaimed to build picnic tables and signage. DEP works hard every day to protect the watershed while also expanding recreation for watershed communities, and Devasego Park is a shining example of the benefits of that diligent work.

I also stopped by the Tannersville WWTP and was met by the plant Chief Operator **Fritz Carlson**, and was able to see the completed repairs to Allen Road—that the access road to the plant—that was damaged during Hurricane Irene.

DEP has done tremendous work in the aftermath of last year's storms, but we must continually improve and enhance our operations to ensure preparedness for whatever the future may hold.

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

For those of us that hear the term “green infrastructure” and think it means that pipes are available in a new color scheme, **Mikelle Adgate** can help. Green infrastructure is an innovative stormwater management strategy that relies on vegetation and other natural systems to capture rainwater and thereby reduce runoff and mitigate combined sewer overflows (CSOs). When it rains, stormwater hits impervious surfaces, such as roofs and sidewalks and enters the combined sewer system. Nearly two-thirds of the city has combined sewers and the pollution caused by overflows impacts water-quality in the city’s local waterways.



Assistant Commissioner **Magdi Farag, Margot Walker, Linda Barghashah, Ray Palmares, Tetyana Klymenko, and Josh Landecker** as “the heart and soul of the program.” Rather than rely on large underground tanks to detain stormwater, green infrastructure uses smaller, less costly methods such as bioswales, and blue or green roofs to manage runoff. Bioswales look like street trees, but they are specifically designed to capture stormwater flowing down the street. These and other elements are critical for successful implementation of green infrastructure citywide.

While earning her Master’s degree in public policy and non-profit management, Adgate spent time with the World Bank, which reinforced her view that water is often at the core of vital issues such as sustainability and economic development.

Adgate is an avid reader of historical fiction, and her favorite quote by author L.M. Montgomery is “It’s not what the world holds for you. It’s what you bring to it.”

In September 2010, **Mayor Bloomberg** announced the NYC Green Infrastructure Plan—a comprehensive strategy to reduce CSOs through, amongst other things, green infrastructure techniques. Since joining DEP a year and a half ago, Adgate has been an ambassador for the green infrastructure program, giving presentations to elected officials, community boards, and neighborhood organizations to highlight the program’s value. She also administers a grant program that funds green infrastructure projects on private property. For her, “The most interesting thing to happen on the job was to see the birth of the grant program. I first started at DEP shortly before the program was announced and now we’re seeing the 2011 winners start construction. It’s very exciting!”

Adgate readily praises the dynamic seven-person green infrastructure team composed of

Milestones

Congratulations to the following employees: **Abraham Reich**, BEDC, on 44 years of service; **Arthur Trotman**, BWSO, on 33 years of service; **Mark Benedetto**, BPS, on 31 years of service; **Marshall Green**, BEC, on 33 years of service; **John Petito**, BWT, on 33 years of service; **Donna Nicholas**, BWS, on 31 years of service; **Mark Petrucci**, HR, on 31 years of service; **Peter Fackovec**, BWSO, on 31 years of service; Leroy Powe, BWT, on 31 years of service; **Richard Mazzella**, BWSO, on 30 years of service; **Ralph DiMeglio**, BWSO, on 30 years of service; and **Andrew Villani**, DERTA, on 30 years of service.

Did You Know

...the largest outdoor pool in the world is The Crystal Lagoon at San Alfonso del Mar Resort in Chile? The enormous man-made lagoon is on the country’s Pacific coast, in the city of Algarrobo. At nearly 20-acres, the pool draws water directly from the sea using a computer-controlled suction and filtration system. It holds 66 million gallons of seawater and is about the size of 20 Olympic swimming pools. In fact, swimming its length would mean going more than three fifths of a mile. Not only is the pool long, it’s deep. The lagoon holds the Guinness World Record for being the world’s deepest outdoor pool (115 feet).

(On Sludge Vessel, DEP Interns Find Smooth Sailing... continued)



Sludge Boat in the East River between North River and Ward’s Island WWTPs

Of the city’s 14 plants only six have dewatering technology, the final step of the solids treatment prior to disposal. This process reduces the liquid volume of sludge by about 90%. Large centrifuges separate most of the water from the solids in the sludge, creating a substance known as biosolids. The water drawn from this process is then returned to the head of the plant for reprocessing. The biosolids are then used as fertilizer or shipped to landfills.

The day spent on the sludge boat presented a glimpse into the Bureau of Wastewater Treatment’s Marine Operations Section. “Site visits are a crucial learning tool for all employees, not just interns, because it singlehandedly makes the abstract real and the intangible tangible,” said **Kim Seiler**, the organizer of this intern trip. The Marine Section operates all DEP boats including sludge boats, water quality research boats, and boats used to spot illegal dumping. To ensure safety, the captain of the MV Red Hook radios to the Coast Guard before leaving each of the plants and to each on-coming boat before passing. Seiler added, “DEP has some of the most intricate facilities in the country, and one of the advantages of working for this organization is the ability to see complex engineering feats in person.”

The smooth sailing of the boat rests not only on the captain, but also on the mates, mariners, and

engineers that make up the rest of the crew. Three sludge vessels are in operation every day. Each crew includes a captain, two marine engineers, one mate and two mariners who work a 12-14 hour day. Over the course of three days, different groups of interns were taken out by the E-crew, (**Gordon Arnold, William Brennan, Charlie Golden, Brian Kelly, Scott Belfield, Constantine Macris, Abraham Lutterodt, and James Hennessey**) or by the F-crew (**Frank Bryn, Chris Lavin, Doug Royal, Hilary Charles, Tim Kelly, Tommy Lyons, Jon Bailey, and Michael Erlwein**).

The tour took off from North River with a boat full of sludge. Despite being on a sewage ship, with the tanks covered, and the wind blowing on the river, there was hardly any smell at all. The boat docked at Wards Island and attached one of its giant sludge hoses to unload. After nearly two hours of sludge flow into Wards Island, the boat, now sitting much higher in the water, was able to continue on to Newtown Creek to pick up its next load of sludge for dewatering. There, the interns’ tours ended as everyone filed off the boat once again. “All the interns really got to see how the Marine Operations Section crews operate every day,” said **Shreya Amin**, an education intern with the Bureau of Communications and Intergovernmental Affairs. “They help keep this city clean.”

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