

Bill de Blasio, Mayor Emily Lloyd, Commissioner

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### Commissioner's Corner



Incredible progress has been made at Cannonsville Dam in the 20 days since DEP discovered a plume of cloudy water downstream of the dam and began drawing down the reservoir out of an abundance of caution. On Sunday, we announced that repair work had successfully eliminated the turbid plume from the river below the dam, and our water supply operators put Cannonsville Reservoir back into normal service.

WEEKLY

August 4, 2015

# Spotlight on Safety

#### **OSHA's New Confined Space Rule**

OSHA issued a new Confined Spaces in Construction standard on May 4, 2015, which provides construction workers with protections similar to those that manufacturing and general industry workers have, with some differences tailored to the construction industry. This rule emphasizes training, continuous worksite evaluation and monitoring, and communication requirements to further protect workers' health and safety.

Construction workers often perform tasks in confined spaces. Confined spaces such as manholes, crawl spaces, and tanks are not designed for continuous occupancy and are difficult to exit in the event of an emergency. These spaces can present physical and atmospheric hazards. However, these hazards can be prevented if addressed prior to entering the space to perform work.

The new standard became temporarily effective on August 3, 2015, but full enforcement will not begin until October 2, 2015. During this 60-day temporary enforcement period, OSHA will not issue citations to employers who make good faith efforts, including scheduling required training for employees and ordering the necessary equipment to comply with the new standard, as well as taking alternative measures to educate and protect employees from confined space hazards.

For more information on this new regulation, visit OSHA's <u>Confined</u> <u>Spaces in Construction</u> webpage.

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.

These two pieces of good news represent a quick and positive turnaround. The plume of turbidity in the West Branch Delaware River-only 50 yards downstream of the damappeared early in July when workers were drilling boreholes to support the design of a hydroelectric facility planned for the site. An investigation later found that these boreholes had tapped into pressurized groundwater, also known as an artesian aquifer, allowing that groundwater to rise through the holes and carry sediment into the river.

PELINE

Our employees in the watershed took quick and decisive action. Until the source of the sediment could be determined, and the plume eliminated, DEP chose to draw down Cannonsville Reservoir at the maximum rate possible to protect public safety. Local elected officials, emergency responders and downstream residents were informed about the unusual condition during a series of meetings. Intensive monitoring was implemented, including 24-hour observations at the dam, measurements for flow and turbidity within the plume, and increased scrutiny of safety instruments inside the dam.

Extensive testing was also performed. Samples from the plume and the original boreholes were sent to a special lab, which determined the fine silt in the water was coming from the immediate area of the original boreholes, not the dam itself. This important testing reconfirmed that Cannonsville Dam was safe and unaffected by disturbance.

DEP and expert engineers also worked to fix the problem permanently. Drill rigs were brought in from Long Island and Michigan to dig relief wells that tapped into the same artesian aquifer that caused the cloudy plume. By lessening the pressure below ground and giving the



groundwater a new path to flow, the relief wells successfully ended the cloudy discharge by Saturday. Geotechnical engineers will turn their attention this week to grouting shut the original boreholes. As drinking water diversions and downstream releases from Cannonsville Reservoir returned to normal levels this weekend, DEP also pledged to continue its intensive monitoring until all the repairs are finished.

I want to personally thank the dozens of watershed employees who efficiently responded to this emergency. Engineers, planners, scientists and watershed maintainers from the Bureau of Water Supply have successfully managed modified our operations, 24-hour monitoring, outreach and so many other aspects of the response. The Bureau of Engineering, Design & Construction has facilitated the repair project with great care and speed. Our Bureau of Police & Security has provided extra patrols, aerial photos of the site, and surveillance equipment to assist with monitoring at the dam. And the Office of Information Technology helped improve communication at the secluded site.

The steady teamwork at Cannonsville Dam has gone a long way toward protecting New York City's water supply and the thousands of people living downstream.

# We're on Instagram!

In addition to being on <u>Facebook</u>, <u>Twitter</u>, <u>YouTube</u>, <u>Flickr</u>, and <u>Tumblr</u>, we're also on <u>Instagram</u>! Following us on social media is a great way to stay informed about the many projects that DEP manages or supports. Below are two items that we recently published on our NYC Water Instagram account.



Have you ever walked past one of these drinking water sampling stations and wondered what is inside? Here is a behind the scenes look at one of our locations in the West Village as Water Quality Scientist **Sushil Sinha** takes some routine drinking water samples. DEP performs more than 1,000 daily tests of the city's drinking water with samples taken from nearly 1,000 locations throughout the five boroughs. This is in addition to the 225,000 tests performed annually throughout the watershed.



Sludge vessels have been a part of the City's wastewater treatment system since the late 1930s. Today, DEP operates a fleet of sludge vessels that transport nearly 1.2 billion gallons of sludge each year. Sludge is the residual organic material that is removed from wastewater, and dewatering the sludge is the final step in the treatment process. Eight of New York City's 14 wastewater treatment plants have dewatering facilities and six do not. The sludge vessels transport liquid sludge from the six plants not served by onsite dewatering facilities to those equipped with the infrastructure to complete the process. The M/V *Red Hook*, seen here sailing up the East River, is our largest ship. Coming in at 3,135 tons, she is slightly over 350 feet long, 53 feet wide, and has a draft of about 21 feet.

# Out of the Archives



A mixer truck delivers a batch of concrete during construction of City Water Tunnel No. 2 in front of Evander Childs High School in the Bronx. The aggregates and cement are measured and added at the batching plant, and water is carried in the tanks on top. At the work site, the truck operator turns on the water and mixes the batch. Two side dump concrete cars of 1.5 cubic yard capacity and an electric locomotive are shown on the trestle. August 10, 1931. To see more photos from our archives, visit our Flickr account.





A bioswale located on 60<sup>th</sup> Avenue near DEP's Lefrak headquarters has been gaining a lot of attention from passersby for its beautiful blooming Rosemallows or *Hibiscus moscheutos*. The striking flowers grow to be 6-9 inches wide and last only 1-2 days. The plant however continuously produces new flowers in quick succession over the course of its July to September bloom period. At the peak of its bloom period, a large plant can create 20 or more flowers per day.

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