

Testimony of
Kimberly Cipriano
Deputy Chief Operating Officer
New York City Department of Environmental Protection
before the
New York City Council
Committee on Environmental Protection
February 24, 2023

Good afternoon, Chair Gennaro and members of the Environmental Protection committee. I am Kimberly Cipriano, Deputy Chief Operating Officer at the Department of Environmental Protection (DEP). I am here today to speak about New York City's robust testing protocols for drinking water and wastewater, as well as the three bills being heard today. I am joined by two colleagues from the New York City Department of Health and Mental Hygiene (Health Department): Maura Kennelly, Deputy Commissioner of External Affairs, and Scott Hughes, and Director and Assistant Commissioner of the Public Health Lab. I am also joined by DEP colleagues Salome Freud, First Deputy Director in the Bureau of Water Supply, and Jonathan Hoffman, Director of Regulatory Compliance and Innovation in the Bureau of Wastewater Treatment.

For more than a century, DEP has been dedicated to protecting public health and the environment by providing high quality drinking water and managing wastewater and stormwater. Our mission has expanded to include reducing air, noise, and hazardous materials pollution, but our dedication to being a world-class water and wastewater utility has never wavered.

Drinking water testing

DEP provides more than a billion gallons of drinking water every day, serving nearly half the population of the state throughout the City and neighboring communities upstate. Our nearly 2,000-square-mile watershed includes nineteen reservoirs and three controlled lakes. It is located in portions of the Hudson Valley and Catskill Mountains, reaching as far as 125 miles north of the city. We encourage the Council to come tour our reservoir system.

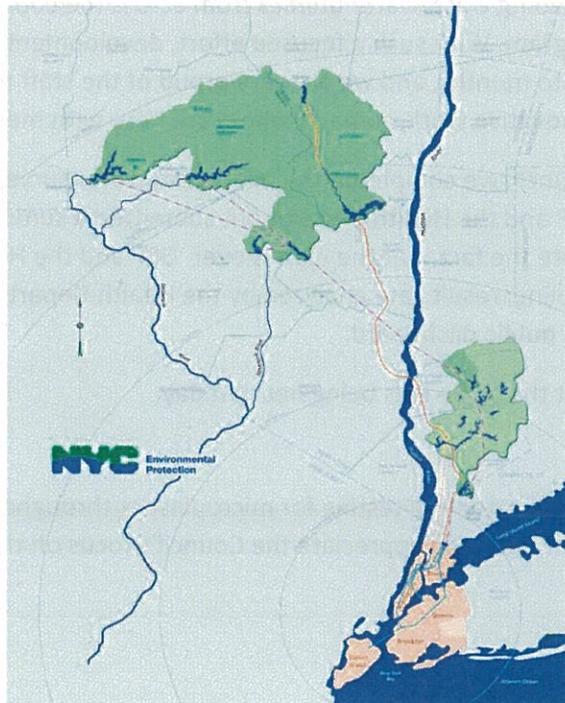


Image: The New York City water supply system



The quality and taste of New York City's drinking water is world-renowned. A dedicated team of scientists throughout the watershed and around the city makes this possible. Each year, our scientists collect nearly 45,000 samples from the watershed and street-side sampling stations. Those samples are analyzed more than 550,000 times at our four water quality laboratories. In addition, our robotic monitoring stations in the reservoirs provide another 2.7 million tests in a year. Testing is conducted throughout the distribution system, in the reservoirs, and in the feeder streams and wells that are potential drinking water supply sources. The tests look for a wide variety of microbiological, chemical, and physical potential contaminants. Our efforts are catalogued in the annual *Drinking Water Supply & Quality Report*.

Wastewater testing

DEP has a team of scientists that test our wastewater for two primary purposes: process control and regulatory compliance. DEP relies on microorganisms that are naturally present in wastewater to consume organic material as part of the wastewater treatment process. DEP's talented team of operators, scientists, and engineers collect samples and monitor these organisms in the laboratory to ensure that they are in the proper balance to optimize the wastewater treatment process. In addition, the New York State Department of Environmental Conservation issues DEP State Pollutant Discharge Elimination System permits, which set standards for acceptable levels of solids, fecal coliform and enterococci, nitrogen and ammonia, heavy metals, in the final wastewater discharged from our 14 wastewater resource recovery facilities. In an average year, DEP collects 300,000 wastewater samples and runs half a million analyses.

In addition to this routine testing, beginning in the early days of the pandemic, DEP and the Health Department worked with the Council to establish a pilot program for epidemiological sampling and testing to quantify and sequence COVID-19 RNA in wastewater. As the world began quarantining in the early days of the COVID-19 pandemic, DEP and the Health Department developed a wastewater surveillance program to supplement clinical testing data and other surveillance data.

Together with national experts, including CDC's National Wastewater Surveillance System and academics from the City University of New York (CUNY), New York University (NYU), Stanford University, University of Michigan, and leading wastewater utilities from across the country, we stood up a robust and scientifically rigorous program. With such a focused effort, development that would normally take many years was condensed into months, and we are very proud of the staff at the Health Department and DEP that have led this innovative work, some of whom are here with me today.

Together with the Council, we completed the pilot wastewater surveillance program outlined in Local Law 28 of 2021, and DEP and the Health Department submitted a summary report about our findings from that pilot. Despite the fact that the pilot is over, DEP and the Health Department continue to conduct twice weekly sampling; results are analyzed by the Health Department and this information is fed into the New York State public dashboard.

I will now speak about the three bills being heard today.

Intro. 797

Intro. 797 would require extensive testing for microplastics throughout the drinking water distribution system in New York City. We appreciate the Council's focus on this topic, as it is an



important emerging area of focus around the world. While DEP shares the goals of this bill, to ensure that NYC's drinking water continues to meet our high standards, we propose a different testing protocol than the one set out in the bill.

I would like to take a step back and talk about how drinking water standards are set. Drinking water standards are set nationally by the US Environmental Protection Agency under the provisions of the Safe Drinking Water Act. In addition to adopting the EPA standards, the New York State Department of Health can establish its own standards or expand upon the EPA standards, provided they are more stringent than the federal standard. For emerging, unregulated contaminants such as microplastics, the New York State Department of Health has established the NYS Drinking Water Quality Council (DWQC) to provide technical review and science-based recommendations for the regulation of new contaminants. At this time, the DWQC has not developed a recommendation specific to microplastics. DEP, as a permitted water utility, does not have the authority to establish drinking water standards. We serve the community by ensuring that the drinking water we provide meets the standards that public health experts have set. As I discussed earlier, we have a robust testing and quality control system to ensure that we meet these standards.

New York State has not established water quality standards relating to microplastics, as the science around the potential health impacts of microplastics is still emerging. That being said, in 2023, DEP will begin proactive testing for microplastics as part of our emerging contaminants testing program, which was established to collect occurrence data for new contaminants of concern as soon as analytical methodologies are available.

Beginning this spring, DEP will monitor for microplastics in the Kensico and New Croton reservoirs as part of this year's emerging contaminant monitoring. We will report on our findings on all emerging contaminants, including microplastics, in the [Watershed Water Quality Annual Report](#), which can be found on DEP's website. Based on the available science, we believe that we will collect equally actionable insights into the presence of microplastics in our water supply system through this targeted testing protocol, rather than through a broad sampling program as outlined in Intro. 797.

Intro. 530

Intro. 530 would require DEP to alert relevant community boards and council members in advance of construction or maintenance work that could cause discolored water or reduced water pressure. Planned and emergency water main shutdowns are necessary to maintain our world class drinking water distribution system. At the same time, we recognize that these disruptions may inconvenience residents and local businesses and we support Council's intention to ensure timely notifications to residents of potential impacts.

Currently, DEP's Community Affairs team routinely sends email notifications for planned DEP water and sewer work to potentially impacted elected officials and community boards. These notifications are sent as soon as the work is scheduled, which is generally in the preceding business day. Notifications for emergency work are sent as soon as possible.

Much of the work on New York City's water mains is managed by our partners at the New York City Department of Design and Construction (DDC). DDC posts notices on relevant buildings and hires



community construction liaisons to communicate with local stakeholders (including elected officials and community boards) during long-term work. Barring emergencies, the DDC liaisons send out 72-hour notifications and 24-hour confirmation emails prior to any planned water shutdowns. These notices include helpful tips for building managers and homeowners about what to expect and who to call if there are any issues once water is restored.

We are always happy to work with DDC and the Council to improve how we communicate with the public and look forward to hearing your feedback today.

Intro. 633

Intro. 633 would make the COVID-19 RNA wastewater sampling and testing program permanent and establish reporting requirements. We are proud of the work we have done establishing the testing program and we support the intention of Intro 633 – to continue using cutting edge science to gather disparate data sources to inform health decisions – but we are concerned that this bill would limit the City’s flexibility to adapt to evolving science and changing public health conditions.

It is important to remember that wastewater surveillance data is just one of many data streams that can inform City’s public health professionals about the current state of COVID-19 in our communities. The Health Department uses this information in conjunction with data from its robust surveillance system, which includes monitoring case reports, syndromic data, and hospital capacity; sequencing specimens to estimate the prevalence of variants of concern and other data streams to make public health decisions. Because of this, we do not believe that legislating the indefinite continuation of the COVID-19 testing specifically allows the flexibility to best use the City’s resources.

Thank you again for the opportunity to testify today. My colleagues and I are happy to answer any questions that you have.



**PLUMBING
FOUNDATION
CITY OF NEW YORK**

To: NYC Council Committee on Environmental Protection

From: April McIver, Executive Director

Date: February 24, 2023

Re: Oversight - NYC's Water and Sewage Testing Infrastructure

INTRODUCTION

My name is April McIver and I am the Executive Director of the Plumbing Foundation City of New York, Inc. The Plumbing Foundation was founded in 1986 and is a non-profit organization of small and large, union and non-union plumbing contractors, engineering associations, supply houses, and manufacturers whose mission is to protect the public health and safety of New York City through the enactment and enforcement of safe plumbing codes.

COMMENTS

We commend the NYC Council Committee on Environmental Protection for holding today's hearing on this very important topic. This is a step in the right direction to ensure the safety of NYC's water and sewer systems. The Plumbing Foundation supports introductions 530-2022 (notification of discolored water or reduction of water pressure), 633-2022 (creation of a permanent COVID-19 wastewater testing program and the reporting of testing results, and to repeal section 24-531 of such code, relating to the creation of a pilot program to test sewage for SARS-CoV-2 RNA), and 797-2022 (testing drinking water for the presence of microplastics). A recommendation before passing these bills is to ensure they have clearly defined terms. As you may know, during the rulemaking process many times agencies interpret laws differently than the Council intended, which can weaken well-intended laws.

Additionally, we would be remiss to not emphasize our concern that the Council through its Housing & Buildings, Health, and/or Environmental Protection Committees has not held a hearing on vital Legionella testing legislation. Int. 783-2022 is similar in nature to the bills discussed today in that it is an important water quality and safety measure to protect New Yorkers from Legionnaires' Disease spread through building water systems. Every year New Yorkers are exposed to Legionella through water aerosols and every year someone or worse—multiple people—get sick and die. In Spring of 2022, the Highbridge community in the Bronx experienced a cluster of Legionnaires' cases. Twenty-four people were diagnosed with Legionnaires' disease; two people died and 4 people were still hospitalized as of June 2022.¹ We see similar cases every single year, even since the Council passed legislation requiring testing of cooling towers for Legionella—that is simply not enough. Legionella can grow throughout a building water system and exist in potable water. Taking a shower can even expose someone to Legionella.

We, therefore, urge the NYC Council to no longer delay taking action on Int. 783-2022.

¹www.nyc.gov/site/doh/about/press/pr2022/updates-legionnaires-disease-highbridge-bronx-0601.page#:~:text=June%201%2C%202022%20%E2%80%94%20The%20Health,disease%20since%20May%203%2C%202022.

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Salome Freud

Address: 1st Deputy Director Water

I represent: Quality & Innovation

Address: DEP

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Jonathan Hoffman

Address: Director of Regulatory Compliance - DEP

I represent: _____

Address: _____

**THE COUNCIL
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Appearance Card

I intend to appear and speak on Int. No. _____ Res. No. _____

in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Mauro Kennedy

Address: Deputy Commissioner

I represent: NYC Health Department

Address: _____

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THE CITY OF NEW YORK**

Appearance Card

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in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Kimberly Cipriano

Address: Deputy Chief Operating Officer

I represent: DEP

Address: _____

Please complete this card and return to the Sergeant-at-Arms

**THE COUNCIL
THE CITY OF NEW YORK**

Appearance Card

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in favor in opposition

Date: _____

(PLEASE PRINT)

Name: Dr. Scott Hughes

Address: Director, Public Health Lab

I represent: NYC Health Department

Address: _____

Please complete this card and return to the Sergeant-at-Arms