



Manhattan

Queens



NEW YORK CITY
HOUSING
AUTHORITY

Riis Houses Water Quality Update

October 2022

HARBORVIEW TERRACE
ROBBINS PLAZA
RAVENSWOOD
WOODSIDE
CLIFFENSBIDGE NORTH
CLIFFENSBIDGE SOUTH
ELIJAH
CHELSEA ADDITION
CHELSEA
FULTON
STRAUS
CAMPOS PLAZA II
LOWER EAST SIDE REHAB (GROUP 5)
LOWER EAST SIDE II
FIRST HOUSES
33-02 49TH AVENUE
23 ASH STREET
LOWER EAST SIDE III
BRACKETT PLAZA
LATIMER GARDENS
BLAND
LEAVITT STREET-34TH AVENUE
FOREST HILLS COOP (105TH STREET-62ND DRIVE)
POMOROK
SHELTON HOUSE
SOUTH JAMAICA
303 VERNON AVENUE
BUSHWICK II COA (GROUP E)
HOPE GARDENS
BUSHWICK II (GROUPS A & C)
BUSHWICK II (GROUPS B & D)
PALMETTO GARDENS
SARATOGA VILLAGE
BREVOORT
OCEAN HILL APARTMENTS
KINGSBOROUGH
KINGSBOROUGH EXTENSION
OCEAN HILL BROWNVILLE
GLENMORE PLAZA
LOW WOODS
FORENINO PLAZA
BELMONT-SUTTER AREA
CYPRESS HILLS
EAST NEW YORK CITY LINE
PINK
212 ASHFORD STREET
BOULEVARD
PENNSYLVANIA AVE-WORTHMAN AVE
VANDALIA AVENUE
BREUKELIN
VILLEN
BROWNVILLE
VAN DYKE II
WOODSON
LONG ISLAND BAPTIST HOUSES
UNITY PLAZA (SITES 17 & 20A)
UNITY PLAZA (SITES 1 & 2)
HOWARD
HOWARD AVENUE
CROWN HEIGHTS
ALBANY II
ALBANY
WEEKSVILLE GARDENS
STUYVESANT GARDENS II
STUYVESANT GARDENS
572 WARREN STREET
ATLANTIC TERMINAL SITE 4B
RED HOOK WEST
RED HOOK EAST
STERLING PLACE REHAB (SAINT JOHN'S-STERLING)
STERLING PLACE REHAB (STERLING-BUFFALO)
HOWARD AVENUE-PARK PLACE
GARVEY (GROUP A)
HOWARD AVENUE
RALPH AVENUE REHAB
FENIMORE-LEFFERTS
RUTLAND TOWERS
SUTTER AVE-UNION ST
104-14 TAPSCOTT STREET
TAPSCOTT STREET REHAB
LENOX ROAD-ROCKAWAY PARKWAY
HUGHES APARTMENTS

Agenda

- I. Overview of the New York City Water Supply and Water System at Riis
- II. Understanding Water Quality Testing
- III. The Facts About Arsenic
- IV. The Facts About Bacteriological Testing
- V. The Facts About Cloudy Water
- VI. Questions and Answers

From the Reservoir to Riis: Where Does Your Water Come From?



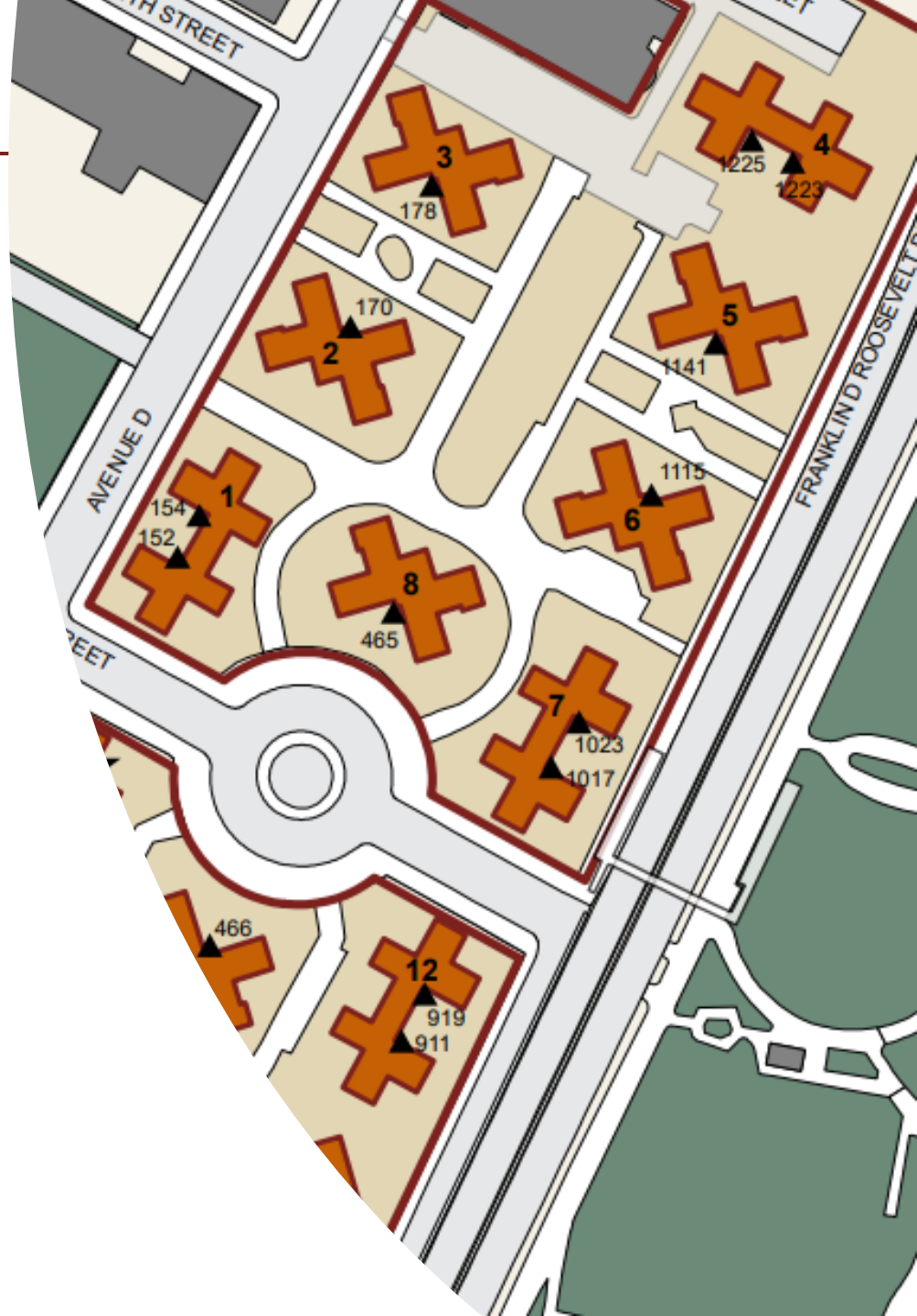
DEP Drinking Water Quality Testing Program

- DEP continuously tests water quality at 1,000 points throughout New York City every year.
- In 2021, DEP performed more than 392,000 analyses on 32,900 samples from the distribution system, meeting all state and federal monitoring requirements.

To see DEP staff collect samples at
our sampling stations:
www.youtube.com/watch?v=6YIZCV

Riis Water Distribution

- At Riis Houses, some buildings receive water directly from city water mains, and some buildings receive water from roof tanks.
- This is very common for all public and private buildings throughout New York City.
- NYC water has enough pressure to reach up to the 6th floor, but higher floors need roof tanks and pumps to provide water.



What is a House Pump?

House Pumps pump the water received from the NYC system “up” because additional pressure is needed to supply water to apartments above the 6th floor.



Roof Tanks: How do they work?

- ✓ Roof tanks receive water from the house pumps. Then, through gravity, the tanks supply water to buildings with more than six floors.
- ✓ Roof tanks are located on Buildings 8 and 11
- ✓ Roof tanks must receive annual inspection and cleaning, per DOHMH requirements



466 East 10th Street – Building 11

What about my tap?

Your tap has a small screen called an aerator, which mixes air with the water.

These small screens improve water efficiency, shape the stream of water, and control the flow to prevent splashing etc.



The Facts About Arsenic

- Arsenic occurs naturally in the environment and as a by-product of some agricultural and industrial activities.
- Per DEP, Arsenic is not detected in New York City Water.

JUST THE FACTS FOR CONSUMERS



ARSENIC IN YOUR DRINKING WATER

What is arsenic?

Arsenic is a toxic chemical element that is unevenly distributed in the Earth's crust in soil, rocks, and minerals.

How does arsenic get into my drinking water?

Arsenic occurs naturally in the environment and as a by-product of some agricultural and industrial activities. It can enter drinking water through the ground or as runoff into surface water sources.

How is arsenic in drinking water regulated?

In 1974, Congress passed the Safe Drinking Water Act. This law directs EPA to issue non-enforceable health goals and enforceable drinking water regulations for contaminants that may cause health problems. The goals, which reflect the level at which no adverse health effects are expected, are called maximum contaminant level goals (MCLGs). The MCLG for arsenic is 0 parts per billion (ppb).

The enforceable standard for arsenic is a maximum contaminant level (MCL). MCLs are set as close to the health goals as possible, considering cost, benefits, and the ability of public water systems to detect and remove contaminants using suitable treatment technologies.

Why should I be concerned about arsenic in my drinking water?

Although short-term exposures to high doses (about a thousand times higher than the drinking water standard) cause adverse effects in people, such exposures do not occur from public water supplies in the U.S. that comply with the arsenic MCL.

Some people who drink water containing arsenic in excess of EPA's standard over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. Health effects might include:

- Thickening and discoloration of the skin, stomach pain, nausea, vomiting, diarrhea, and liver effects;
- Cardiovascular, pulmonary, immunological, neurological (e.g., numbness and partial paralysis), reproductive, and endocrine (e.g., diabetes) effects;
- Cancer of the bladder, lungs, skin, kidney, nasal passages, liver, and prostate.

What is EPA's standard for arsenic in drinking water?

To protect consumers served by public water systems from the health risks of long-term (chronic) arsenic exposure, EPA recently lowered the arsenic MCL from 50 ppb to 10 ppb.

**The following parameters were monitored for,
but not detected in any sample in 2021**

CONVENTIONAL PHYSICAL AND CHEMICAL PARAMETERS:

Antimony, Arsenic, Asbestos, Beryllium, Cadmium, Cyanide, Gross alpha, Lead, Mercury, Nitrite, Selenium, Silver, Thallium, Uranium

From NYCDEP, 2021 Drinking Water Supply and Quality Report

Statement of Retracted and Revised Results
September 9, 2022 8:30am CT

On September 7, 2022, the lab became aware of the critical situation regarding the arsenic results produced for the Jacob Riis Houses. The lab immediately began an internal investigation into the original results. Simultaneously the lab retested the original sample, which was still within hold time, using a direct injection without digestion. Following a thorough internal audit on the reported data, the lab found that the results for arsenic reported on August 26, 2022 and September 1, 2022 were incorrect. The retested analysis confirmed this conclusion and revised reports were created and issued on September 8, 2022.

For the avoidance of doubt, the two different testing procedures applied are provided below. The first procedure (Original Testing Method) summarizes the method applied on August 26, 2022 and September 1, 2022 reports. The second procedure (September 8, 2022 Testing Method) summarizes what was applied on September 8, 2022 once the lab became aware of the critical situation regarding the arsenic results produced for the Jacob Riis Houses.

Original Testing Method

1. The samples were prepped by adding 4ml of nitric acid and 1ml of HCL to 40ml of sample.
2. The samples were then placed in the microwave for the digestion process. Following digestion, the samples were cooled.
3. Samples were diluted to a final volume of 50 ml at a 1.25x prep factor.
4. Samples delivered to technician for analysis. Prior to analysis, the samples were run with no bench dilution, but the digestion blank was analyzed at a 5x dilution.
5. After analysis, samples were loaded into the laboratory information management system (LIMS). Due to the dilution of the blank, LIMS raised the MDL and reporting limit to correct for the dilution.

Conclusion: Trace levels of arsenic were introduced to the samples during the digestion process. The dilution of the blank hid the true arsenic level within the blank, which artificially inflated the relative arsenic levels within the samples.

September 8, 2022 Testing Method

1. No addition of acids.
2. No digestion prep.
3. No dilutions.
4. Sample delivered to technician for analysis. No bench dilutions.
5. After analysis, sample was loaded into LIMS. Since there was no dilution, LIMS did not raise the MDL and reporting limit to correct for dilution.

Conclusion: The original testing method for the samples reported on August 26, 2022 included a test for silver, which required digestion and dilutions. As indicated in the Original Testing Method conclusion, these complexities introduced trace levels of arsenic and a dilution factor correction. Without the need for silver testing, the September 8, 2022 testing method was simplified specifically for arsenic, avoiding all potential contamination or factoring issues. The simplified arsenic analysis resulted in detection well below the MCL and supersedes all prior analyses on this sample.

Based on our investigation, we believe any contamination for arsenic found in these specific samples to be at trace levels, well below the Federal MCL of 10PPB.

We retract all arsenic results produced on August 26, 2022 and September 1, 2022. We issued revised reports on September 8, 2022 reflecting these revised results.

Retracted Arsenic Results at Riis Caused by Lab Error

“We retract all
arsenic results
produced on August
26, 2022 and
September 1, 2022.”

Comparison of Incorrect Results to the Results Analyzed by NY State Certified Lab

| | Incorrect Results from Liquitech/EMT | Samples Collected by LIRO Group and Analyzed by NYS Certified Lab |
|-------------------------------------|--|--|
| NYS Certified Lab? | NO | YES |
| Number of Arsenic Tests by Each Lab | 7 Samples | <u>207</u> Samples to date |
| Number of Locations Sampled | <ul style="list-style-type: none"> ✓ 2 Points of Entry ✓ 3 Apartments in ✓ 2 Buildings | <ul style="list-style-type: none"> ✓ 2 Points of Entry ✓ 198 apartments in ✓ All 19 buildings ✓ Both roof tanks ✓ 2 Community Centers |
| Testing Results | <ul style="list-style-type: none"> ✓ 12.2 – 14.1 ppb ✓ All results self-retracted by lab due to lab errors | <ul style="list-style-type: none"> ✓ Non-detect to 0.6 ppb, far below EPA standard ✓ Vast majority of samples non-detect |

Bacteriological Samples

- Health Department reviewed the results of water sampling that NYCHA's environmental consultant collected on September 6, 2022, and September 7, 2022.
- The samples were collected after flushing was conducted of the plumbing system at Riis Houses. NYCHA analyzed for the standard bacteria tests for drinking water — including total coliform and E. coli — which all met EPA drinking water standards.
- Additionally, NYCHA had LiRo perform additional tests.
- DEP collected samples of the water feeding Riis Houses on August 13 and 15, 2022, and September 2 and 9, 2022, and tested them for total coliform, E. coli, and HPC. All DEP tests — which were collected before and after flushing — also met safe standards for drinking water.

Cloudy Water Concerns

Why does my drinking water look cloudy?



Air becomes trapped in the water as it makes its long trip from the upstate reservoirs to the city. As a result, bubbles of air can sometimes cause water to appear cloudy or milky. This condition is not a public health concern. The cloudiness is temporary and clears quickly after water flows out of the tap and the extra air is released.

If you notice that your tap water has an unusual cloudy or milky appearance, call **311** or [file a report online](#), so we can follow up.



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Why does my drinking water look cloudy sometimes?

Once in a while you get a glass of water that looks cloudy; maybe milky is a better term. After a few seconds it miraculously clears up! The cloudiness is due to tiny air bubbles in the water. Like any bubbles, the air rises to the top of the water and goes into the air, clearing up the water. The water in the pipes coming into your house might be under a bit of pressure. This causes gases (air) that are dissolved in the pressurized water to come out as the water flows into your glass, which is under normal atmospheric pressure.

Ongoing Water Quality Confidence Sampling at Riis

Twice Monthly Through End of Year

- September 24 – Results online at <https://www1.nyc.gov/site/nycha/residents/riis-houses-water.page>
- October 14
- October 28
- November TBD

Parameters

- Arsenic
- E. Coli
- Total Coliform

Locations

- Representative Apartments in High Rise Buildings
- Both Water Tanks
- Points of Entry

NEW YORK CITY DRINKING WATER SUPPLY AND QUALITY REPORT 2021



What can I do if I have water quality concerns?

- Run your tap (cold water) for 2 minutes or so, especially after periods of disuse (e.g., vacation). This will bring fresher water to your tap. This is also a good idea in the morning.
- Use cold water for cooking, drinking, and preparing baby formula.
- Clean the aerator monthly and contact NYCHA Customer Contact Center (718-707-7771) if you need a replacement aerator
- Request Free Water Testing Kits for Lead from New York City DEP online or through 311
- Contact NYCHA Customer Contact Center and 311 if you have excessively cloudy water, discolored water, or odors.
- Read NYC DEP's Annual Water Reports

Thank you!

Questions?