



AQUARION
Water Company

Stewards of the Environment™

— **2022** —
WATER
QUALITY
REPORT

Water: it's too precious to waste

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HAMPTON SYSTEM

PWS ID#: 1051010

Este informe contiene información importante sobre su agua potable. Pida a alguien que lo traduzca para usted, o hable con alguien que lo entienda.

LETTER FROM THE VICE PRESIDENT



John Walsh
Vice President, Operations
Aquarion Water Company
of Massachusetts

Dear Aquarion Customer:

I have the pleasure of reporting that Aquarion Water Company continued its delivery of high-quality water to our customers in 2022. We met or exceeded all state and federal water quality standards in your water system, as measured by the 3,241 tests we conducted throughout the year. This includes tests for perfluoroalkyl and polyfluoroalkyl (PFAS), substances that, in high concentrations, can cause serious health effects. You can find our 2022 PFAS updates and test results at www.aquarionwater.com/pfas.

Last summer brought drought back to much of the state, but irrigation schedules helped to maintain adequate water supplies, as did invaluable help from customers everywhere who not only reduced outdoor water use, but also fixed leaks and took other vital conservation measures. Thank you for all you do to avoid wasting water — our most precious resource. For more ideas on what you can do to conserve water, please see page 9 in this report or visit www.aquarionwater.com/conserve.

With Appreciation,



John Walsh



Questions About Your Water Quality Report?

Customers who have questions about water quality should call us at **800-732-9678**.

For discolored water, service problems or after-hours emergencies, call **800-732-9678**.

Customers may also email us at waterquality@aquarionwater.com, or visit www.aquarionwater.com.

New Hampshire Department of Environmental Services:
603-271-3503 or des.state.nh.us.

U.S. Environmental Protection Agency's Safe Drinking Water Hotline:
800-426-4791 or www.epa.gov/safewater.

What is a Water Quality Report?

Aquarion Water Company's annual Water Quality Report, also known as the Consumer Confidence Report (CCR), details the quality of your drinking water, where it comes from, and how to get more information. This annual report documents all detected primary and secondary drinking water contaminants and their respective standards known as Maximum Contaminant Levels (MCLs).

WATER QUALITY TABLE

Your water has been tested for more than 100 compounds that are important to public health. Only those compounds detected, all of which were below the amounts allowed by state and federal law, are reported in this table. Most of these compounds are either naturally occurring or introduced as treatment to improve water quality. Monitoring frequency varies

from daily to once every nine years per U.S. Environmental Protection Agency (EPA) regulation, depending on the parameter. Our testing encompasses the full range of regulated inorganic, organic and radiological compounds and microbiological and physical parameters.

Substance (Units of Measure)	Action Level(AL)	90th percentile sample value *	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination
LEAD AND COPPER						
Copper (ppm)	1.3	0.72*	7/21/22 - 8/22/22	0	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	15	ND < 1**	7/21/22 - 8/22/22	0	NO	Corrosion of household plumbing systems, erosion of natural deposits

DETECTED WATER QUALITY RESULTS

Substance (Units of Measure)	Level Detected* Average	Level Detected* Range	Date	MCL	MCLG	Violation Yes/No	Likely Source of Contamination
INORGANIC SUBSTANCES							
Arsenic (ppb)	2	ND < 1 - 3	1/4/22, 2/28/22 4/1/2022, 4/11/22, 7/6/2022, 10/17/2022, 10/31/2022	5	0	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	0.012	0.011 - 0.013	7/6/2020, 4/1/2022	2	2	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine (ppm)	0.67	0.23 - 1.10	Monthly, 2022	MRDL = 4	MRDLG = 4	NO	Water additive used to control microbes
Chromium (ppb)	1	ND < 1 - 2	7/6/2020, 4/1/2022	100	100	NO	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	0.11	ND < 0.01 - 0.21	7/6/2020, 4/1/2022	4	4	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	1.39	0.72 - 1.90	4/11/2022, 7/6/2022, 7/12/2022	10	10	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Continued on page 4

WATER QUALITY TABLE Continued from page 3

Substance (Units of Measure)	Level Detected* Average	Level Detected* Range	Date	MCL	MCLG	Violation Yes/No	Likely Source of Contamination
VOLATILE ORGANIC CONTAMINANTS							
Haloacetic Acids 5 (HAA) (ppb)	4***	2 - 5	7/11/22	60	NA	NO	By-product of drinking water chlorination
Total Trihalomethanes (TTHM) (ppb)	14***	9 - 18	7/11/22	80	NA	NO	By-product of drinking water chlorination

PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONTAMINANTS							
Perfluorooctane sulfonic acid (PFOS) (ppt)	3	2 - 3	2/28/2022, 4/1/2022, 7/6/2022, 10/17/2022	15	NA	NO	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
Perfluorooctanoic acid (PFOA) (ppt)	3	3 - 4	2/28/2022, 4/1/2022, 7/6/2022, 10/17/2022	12	NA	NO	

Secondary MCLs (SMCL)	Level Detected* Average	Level Detected* Range	Date	Treatment technique (if any)	SMCL	50% Ambient Groundwater Quality Standard	Ambient Groundwater Quality Standard	Specific Criteria and Reason for Monitoring
SECONDARY CONTAMINANTS								
Chloride (ppm)	86	63 - 122	Monthly, 2022	NA	250	NA	NA	Wastewater, road salt, water softeners, corrosion
Iron (ppm)	0.02	ND < 0.01 - 0.03	7/6/2020, 4/1/2022	NA	0.3	NA	NA	Geological
Manganese (ppm)	0.005	ND < 0.001 - 0.010	7/6/2020, 4/1/2022	NA	0.05	0.15	0.3	Geological
Nickel (ppm)	0.006	ND < 0.001 - 0.011	7/6/2020, 4/1/2022	NA	Not established; reporting is required for detections	0.005	0.01	Geological; electroplating, battery production, ceramics
Sodium (ppm)	59.7	51.3 - 68.0	7/6/2020, 4/1/2022	NA	100 - 250	NA	NA	We are required to regularly sample for sodium
Sulfate (ppm)	23	11 - 37	Monthly, 2022	NA	250	250	250	Naturally occurring
Zinc (ppm)	0.045	ND < 0.001 - 0.090	7/6/2020, 4/1/2022	NA	5	NA	NA	Galvanized pipes

WATER QUALITY TABLE Continued from page 4

Substance (Units of Measure)	Level Detected* Average	Level Detected* Range	Date	MCL	MCLG	Violation Yes/No	Likely Source of Contamination
UNREGULATED PFAS CONTAMINANTS							
Perfluorobutane sulfonic Acid (PFBA) (ppt)	ND < 2	ND < 2 - 2	2/28/2022, 4/1/2022, 7/6/2022, 10/17/2022	NA	0	NA	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
Perfluorohexanoic Acid (PFHxA) (ppt)	ND < 2	ND < 2 - 4	2/28/2022, 4/1/2022, 7/6/2022, 10/17/2022	NA	0	NA	
Perfluoropentanoic Acid (PFPeA) (ppt)	2	ND < 2 - 5	2/28/2022, 4/1/2022, 7/6/2022, 10/17/2022	NA	0	NA	

Footnotes and Definitions

< Less than

AL Action Level:

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Ambient Groundwater Quality Standard or AGQS:

The maximum concentration levels for contaminants in groundwater that are

established under RSA 485-C, the Groundwater Protection Act.

MCL Maximum Contaminant Level:

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG Maximum Contaminant Level Goal:

The level of a contaminant in drinking water below which there is no known

or expected risk to health. MCLGs allow for a margin of safety.

MRDL Maximum Residual Disinfectant Level:

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG Maximum Residual Disinfectant Level Goal:

The level of a drinking water disinfectant below which there is no

known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

NA Not Applicable

ND Not Detected

ppb parts per billion, or micrograms per liter (ug/L)

ppm parts per million, or milligrams per liter (mg/L)

ppt parts per trillion, or nanograms per liter (ng/L)

SMCL Secondary Maximum Contaminant Level

* 90th percentile value in copper monitoring. Result is representative of customer sampling stagnant water. No locations exceeded the action level for copper.

** 90th percentile value in lead monitoring. Result is representative of customer sampling stagnant water. No locations exceeded the action level for lead.

*** Reported value is the

highest measurement for disinfection by-products in the distribution system. Values in the range are individual measurements.

HEALTH EFFECTS

Arsenic: While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research

the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Sodium: Sodium-sensitive individuals such as those experiencing hypertension, kidney failure, or congestive heart failure, who drink water containing sodium should be aware of levels where exposures are being carefully controlled.

YOUR HEALTH IS OUR PRIORITY

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline [800-426-4791](tel:800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

- Organic chemical contaminants, including per- and polyfluoroalkyl substances, synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribe regulations which limit the amount of certain

contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



Where Does Your Water Come From?

Water is pumped from 16 state-approved wells in the four towns, it is delivered to you through an extensive underground piping system. The water supply serves about 22,900 residents in Hampton, North Hampton, and Rye, plus thousands of visitors and tourists. In 2022, our wells supplied an average of 2 million gallons of water per day to the system.

How Is Your Water Treated?

Water from the wells is naturally filtered ground water. Disinfection and corrosion control treatment are in place at all sources. In addition, Well #6 has PFAS removal treatment.

Source Water Assessment Report

The New Hampshire Department of Environmental Services (NHDES) prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared in 2002 and 2005, are noted below.

The Source Water Assessment Report indicates an average of 6 contamination susceptibility factors were rated low, an average of 4 were rated medium, and 2 were rated high for 16 of our water sources. The complete report

YOUR HEALTH IS OUR PRIORITY

is available for inspection during normal business hour at our offices at Aquarion Water Company, 7 Scott Road, Hampton, NH.

Copper

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level* over a relatively short period of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease

should consult their personal doctor. Major sources of copper in drinking water include corrosion of household plumbing systems and erosion of natural deposits.

Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known

to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Immuno-Compromised People

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and

infants can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. The Environmental Protection Agency and Centers for Disease Control and Prevention (EPA/CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline [800-426-4791](tel:800-426-4791).



LEAD IN DRINKING WATER: THE FACTS

The EPA and NHDES have established extensive regulations for water utilities to follow regarding lead. If lead is present in drinking water, it can cause numerous harmful effects on a person's health. The EPA has determined there is no safe level of lead.

Aquarion maintains a regular schedule for lead monitoring.

Learning About Lead

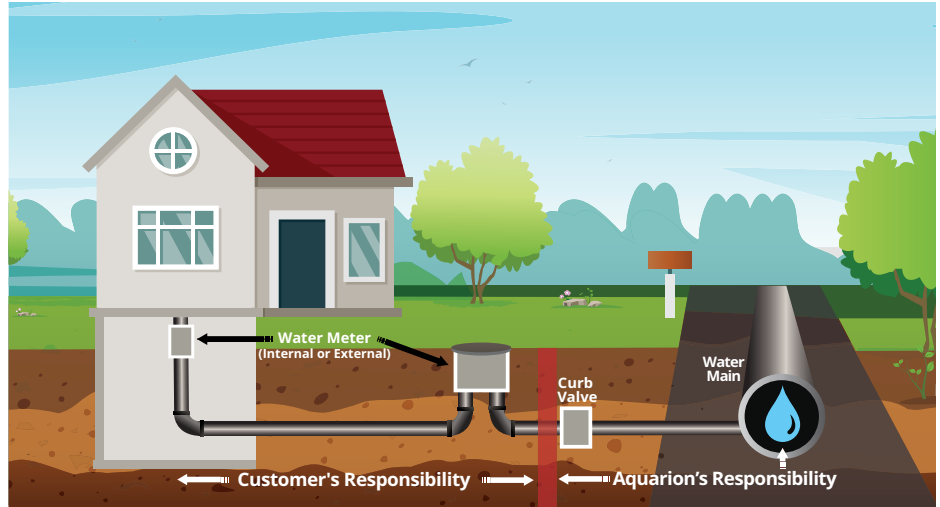
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. This water system is responsible for high quality drinking water but cannot control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for

drinking or cooking. Do not use hot water for drinking and cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at www.epa.gov/ground-water-and-drinking-water.

What to do About Lead in a Service Line

A service line is the pipe that connects a customer's premises to Aquarion's water main in the street (see illustration above). Homes built before 1986 may have lead service lines (with a few exceptions, most were installed in homes built before 1930), and those built before 1986 may have lead solder and brass fittings (which may have a lead content).

A lead service line can be the primary source of lead in your drinking water, because there is a much greater surface area where lead contacts the



Customer and Aquarion responsibilities shown are representative for most customers.

water, compared to lead-soldered pipe joints and leaded brass fixtures. If your house or other structure was built prior to 1988, you should check the service line where it enters the wall of your basement to see if it is made of lead. If it is a lead line, contact Aquarion at 800-732-9678 for advice on replacing it. This will help reduce your potential exposure to lead in drinking water.

Aquarion offers more detailed information on lead in drinking water and how to minimize exposure on our website at www.aquarionwater.com/learnaboutlead.

CONSERVATION

Conservation

By reducing water consumption, Aquarion customers have made outstanding progress in ensuring that our area has enough water, no matter what the skies deliver. Many thanks to all the customers who cut back on outdoor sprinkler irrigation and other uses, helping to save more than 2 billion gallons of water across our systems over the last five years. There's still more to do, though. Here are some easy tips on what everyone can do to conserve the supply of this irreplaceable resource:

Reduce excessive irrigation

Get rid of wasteful, "set 'em and forget 'em" timers. Water only when the ground feels dry. Use WaterSense labeled spray sprinkler bodies.

Rely more on the sky

Put a rain barrel under a down-spout to capture rainwater for your garden.

Forget fertilizing

Many use salts that make your lawn less drought-resistant.

Jilt the jiggling

Fix leaky toilets. Watch our step-by-step video at www.aquarionwater.com about finding and fixing leaks. Better yet, upgrade to a new, WaterSense-labeled model to save three or more gallons with every flush.

Put scraps to work

Compost vegetable scraps to nourish your garden, instead of using water to grind them up in your garbage disposal.

For more tips, visit www.aquarionwater.com/conserves.



HOW YOU CAN GET INVOLVED

Aquarion Water Company has a customer advisory board comprised of people who are interested in learning first-hand what we are working on in our systems and what we are planning for the future. If you're interested in attending any of these meetings, please call our New Hampshire office at [603-926-3319 ext 116](tel:603-926-3319) and provide your contact information so we can inform you about scheduled meeting dates.

