



# 2024 ANNUAL WATER QUALITY REPORT

## Hazardville Water Company – Rye Hill (Somers) System

(Connecticut Public Water System ID #: CT1299031)

**Reporting Period: January 1, 2024 - December 31, 2024**

The Hazardville Water Company is pleased to provide you with this year's Annual Water Quality Report. This report is designed to inform you about the quality of your drinking water and the services we deliver to you daily. Our goal is to provide you with a safe and dependable supply of drinking water. We are hopeful this report will help you better understand the efforts we expend to optimize the water treatment processes and to protect our water resources. We are committed to ensuring that you have the highest quality of drinking water.

In order to provide customers with the highest quality of drinking water possible, all HWC's water treatment facility personnel are certified at or above the required level of classification set by the State of Connecticut for the HWC system. To become certified, our employees must obtain experience in the field of water treatment and pass a written examination administered by the State Department of Public Health.

Customers of the Hazardville Water Company Rye Hill System receive their drinking water from the Connecticut Water Company's Enfield/Somers area wells. This water is chlorinated as a precautionary measure to protect against waterborne diseases. We are pleased to report that all of our drinking water is considered safe for consumption by State and Federal drinking water standards.

In order to prevent contamination from occurring in our source water supplies, the HWC utilizes an active source water protection plan that is reviewed and updated annually to account for system and regulatory changes. This plan includes regular inspections of critical areas which influence or have the potential to influence the quality of the Company's source water, continuous water quality monitoring of the source and distribution water, and regular sanitary surveys of all well fields.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants -- no drinking water is pure. As water travels through the ground, it can dissolve naturally occurring minerals and naturally occurring radioactive material and maintain these substances in solution. Animal and human activity may also influence the quality of drinking water. Leaking underground storage tanks, failing septic systems, accidental chemical spills, and agricultural runoff are examples of contamination by human activity.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of harmful contaminants in drinking water provided by public water systems. The Food and Drug Administration (FDA)

regulations establish limits for contaminants in bottled water. It is important to remember that the presence of contaminants does not necessarily indicate that water poses a health risk, provided that the contaminants found are at extremely low levels – levels lower than the limits established by the State and Federal agencies. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The State of Connecticut Department of Public Health (DPH) in cooperation with the Department of Environmental Protection (DEEP) completed assessments of the Hazardville Water Company and Connecticut Water Company's source waters in 2003. These assessments are intended to provide HWC's consumers with information about where their public drinking water comes from, sources of potential contamination that could impact it, and what can be done to help protect it. The source water assessment results for the HWC wells indicate that there is an overall moderate to high risk of contamination from identified potential sources of contamination. It should be noted that this rating does not necessarily imply poor water quality or violations of the Connecticut Public Health Code. The entire assessment report can be viewed on the DPH's website at <http://www.dph.state.ct.us/brs/water/swap.htm>.

The table on the next page lists the results of over 110 different substances that the Hazardville Water Company tests for regularly. Substances not listed in the table were not found in the treated water supply.

Please note that the results indicated represent only the highest levels found during the sampling period unless otherwise noted. Because the CWC uses many wells, some variability exists throughout the system due to blending; therefore, most homes will experience lesser amounts of contaminants in their drinking water than those reported. Private state certified drinking water laboratories are utilized to ensure that the water supplied to you meets all state and federal drinking water standards.

During the sampling period covered in this report, the HWC is pleased to announce that your drinking water meets all federal and state standards and requirements. Although, from time to time, some contaminants have been detected, the EPA has determined that your water IS SAFE at these levels.

**HAZARDVILLE WATER COMPANY – RYE HILL SYSTEM**  
**ANNUAL 2024 DRINKING WATER QUALITY REPORT: TEST RESULTS**

SOMERS RYEHILL SYSTEM 2024								
CONTAMINANTS	AMOUNT DETECTED	RANGE		YEAR SAMPLED	MCL	MCLG	VIOLATION	POSSIBLE SOURCES OF CONTAMINATION
		LOW	HIGH					
<b>DISINFECTANT RESIDUAL</b>								
Chlorine (ppm)	1.1	0.7	1.1	2024	4 <sup>4</sup>	4 <sup>5</sup>	No	Water additive to control microbes
<b>INORGANIC CONTAMINANTS</b>								
Arsenic (ppb) <sup>3</sup>	4	ND	4	2022 - 24	10	10	No	Erosion of natural deposits
Barium (ppm) <sup>3</sup>	0.38	0.01	0.38	2022 - 24	2	2	No	Erosion of natural deposits
Chloride (ppm) <sup>3</sup>	83	30	83	2022 - 24	250	N/A	No	Erosion of natural deposits, road salting
Chromium (ppb) <sup>3</sup>	1	ND	1	2022 - 24	100	100	No	Erosion of natural deposits
Copper (ppm) <sup>3</sup>	0.12*	0.05	0.14	2024	AL = 1.3	1.3	No	Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives
Fluoride (ppm)	0.6	ND	0.6	2022 - 24	4	4	No	
Nitrate (ppm)	4.1	0.1	4.1	2024	10	10	No	Fertilizer run-off, leaking septic tanks, natural deposits
Selenium (ppb) <sup>3</sup>	2	ND	2	2022 - 24	50	50	No	Erosion of natural deposits
Sodium (ppm) <sup>3</sup>	31	13	31	2022 - 24	28 <sup>2</sup>	N/A	No	Erosion of natural deposits, road salting
Sulfate (ppm) <sup>3</sup>	76	6	76	2022 - 24	N/A	N/A	No	Erosion of natural deposits
TOC	Ratio = 1.7	-	1.7	2024	≥ 1	-	No	Naturally present in environment
<b>DISINFECTION BYPRODUCTS</b>								
TTHM'S (ppb)	39.4	-	39.4	2024	80	0	No	Byproduct of drinking water chlorination
HAA5 (ppb)	3.9	-	3.9	2024	60	0	No	Byproduct of drinking water chlorination
<b>RADIOLOGICALS</b>								
Net Gross Alpha (pCi/L) <sup>3</sup>	3.5	ND	3.5	2022 - 23	15	0	No	Erosion of natural deposits
Combined Radium (pCi/L) <sup>3</sup>	1.5	ND	1.5	2022 - 23	5	0	No	Erosion of natural deposits
Uranium (ppb) <sup>3</sup>	4.4	ND	4.4	2022 - 23	30	0	No	Erosion of natural deposits
Radon (pCi/l)	1836	253	1836	2024	N/A	N/A	No	Erosion of natural deposits
<b>OTHER</b>								
Lithium (ppb)	17.7	ND	17.1	2024	N/A	N/A	No	Erosion of natural deposits, batteries

\* Calculated result for compliance purposes

Footnotes: 1. Number exceeding Action Level for Lead: 0 out of 6 sites sampled

2. Notification Level, MCL does not exist

3. Sampling required every 3 years

4. MRDL (Maximum Residual Disinfectant Level)

5. MRDLG (MRDL Goal)

**Sodium:** During routine water quality testing, the results of one sample indicated a sodium level of 31 ppm. The State of Connecticut has established a notification level of greater than 28 ppm for sodium in drinking water. Further, Section 19-13-B102 of the State Public Health Code requires us to provide a notice to you if the sodium concentration exceeds 28 ppm. The reason for the notification is so that consumers on low or restricted sodium diets may take into account their sodium intake from the drinking water. If you have been placed on a sodium restricted diet, please inform your physician that, based on most recent testing, your water contains 31 ppm of sodium.

**Nitrate:** The highest nitrate result found during the sampling period of 4.1 ppm is lower than the MCL of 10 ppm and is considered safe to drink by state and federal health agencies. However, nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels (in excess of the MCL 10 ppm) in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant and nitrate levels exceed 10 ppm, you should ask advice from your health care provider. As a precaution, the HWC will immediately notify physicians and health care providers in this area along with its customers if the nitrate limit is ever exceeded.

**Radon:** Currently there are no state or federal limits for radon in drinking water; however, the EPA has proposed a limit of 4000 picocuries per liter. It is not clear whether radon that is ingested contributes to cancer or other adverse health conditions. The scientific community and the U. S. Environmental Protection Agency continue to conduct extensive research in order to learn more about radon in drinking water with the ultimate goal of protecting public health.

**Turbidity:** is a measurement of the cloudiness of water and is monitored because it is a good indicator of water quality. High turbidity may hinder the effectiveness of chlorination. The turbidity levels found in the HWC's distribution system are relatively low and currently pose no threat to the chlorination process.

TERM / ABBREVIATION	DEFINITION		
AI = Action Level	The concentration of a contaminant that, if exceeded, triggers a treatment or other requirement, which a water system must follow		
MCL = Maximum Contaminant Level	The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology. Exceeding the MCL triggers mandatory actions such as customer notification and remediation		
MCLG = Maximum Contaminant Level Goal	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants		
Notification Level	The concentration of a contaminant which, if exceeded, the water utility must notify its customers		
pCi/l = Picocuries per liter	A measure of radioactivity in water		
TT = Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water		
HAAs = Haloacetic Acids	TTHMs = Total Trihalomethanes	N/A = Not applicable	ND = None detected
ppt = Parts per trillion	ppb = Parts per billion	ppm = Parts per million	

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, can seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements to the Company's water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

If you have any questions regarding this report or if you would like more information regarding HWC's water quality, please call Dave Fillion, Chief Treatment Plant Operator, at 860-749-0779. The HWC welcomes comments and suggestions that would further enhance the protection and quality of the drinking water. These comments can be made either by calling the above telephone number or in writing to the Hazardville Water Company, 481 Taylor Road, Enfield, CT 06082. Please also visit our website at [www.hazardvillewater.com](http://www.hazardvillewater.com).

## Per and Polyfluoroalkyl Substances (PFAS)

There has been a lot of media attention lately about PFAS. PFAS are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s because of their useful properties. There are thousands of different PFAS, some of which have been more widely used and studied than others. Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS), for example, are two of the most widely used and studied chemicals in the PFAS group. PFOA and PFOS have been replaced in the United States with other PFAS in recent years. One common characteristic of concern of PFAS is that many break down very slowly and can build up in people, animals, and the environment over time and are therefore called “forever chemicals”. The following table shows the latest detected PFAS results in your drinking water:

PER- & POLYFLUOROALKYL (PFAS) SUBSTANCES - 2024			
CONTAMINANT	RANGE	CT DPH AL	COMMON USES
PFOA (ppt)	ND - 5	16	Non-stick and stain-resistant coatings Food packaging Chemically inert coatings Fire-fighting foam Industrial processes
PFOS (ppt)	ND - 5	10	
PFHxA (ppt)	ND - 2.1	240	
PFPeA (ppt)	ND - 3	N/A	

### PFAS Can Be Found in Many Places

PFAS can be present in our water, soil, air, and food as well as in materials found in our homes or workplaces, including:

- **Soil and water at or near waste sites** - at landfills, disposal sites, and hazardous waste sites such as those that fall under the federal Superfund and Resource Conservation and Recovery Act programs.
- **Fire extinguishing foam** - in aqueous film-forming foams (or AFFFs) used to extinguish flammable liquid-based fires. Such foams are used in training and emergency response events at airports, shipyards, military bases, firefighting training facilities, chemical plants, and refineries.
- **Manufacturing or chemical production facilities that produce or use PFAS** – for example at chrome plating, electronics, and certain textile and paper manufacturers.
- **Food** – for example in fish caught from water contaminated by PFAS and dairy products from livestock exposed to PFAS.
- **Food packaging** – for example in grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes, and candy wrappers.
- **Household products and dust** – for example in stain and water-repellent used on carpets, upholstery, clothing, and other fabrics; cleaning products; non-stick cookware; paints, varnishes, and sealants.
- **Personal care products** – for example in certain shampoo, dental floss, and cosmetics.
- **Biosolids** – for example fertilizer from wastewater treatment plants that is used on agricultural lands can affect ground and surface water and animals that graze on the land.
- **Drinking water** – in public drinking water systems and private drinking water wells.

### People Can Be Exposed to PFAS in a Variety of Ways

Due to their widespread production and use, as well as their ability to move and persist in the environment, surveys conducted by the Centers for Disease Control and Prevention (CDC) show that most people in the United States have been exposed to some PFAS. Most known exposures are relatively low, but some can be high, particularly when people are exposed to a concentrated source over long periods of time. Some PFAS chemicals can accumulate in the body over time.

Current research has shown that people can be exposed to PFAS by:

- Working in occupations such as firefighting or chemicals manufacturing and processing.
- Drinking water contaminated with PFAS.
- Eating certain foods that may contain PFAS, including fish.
- Swallowing contaminated soil or dust.
- Breathing air containing PFAS.
- Using products made with PFAS or that are packaged in materials containing PFAS.

Current peer-reviewed scientific studies have shown that exposure to certain levels of PFAS may lead to:

- Reproductive effects such as decreased fertility or increased high blood pressure in pregnant women.
- Developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes.
- Increased risk of some cancers, including prostate, kidney, and testicular cancers.
- Reduced ability of the body's immune system to fight infections, including reduced vaccine response.
- Interference with the body's natural hormones.
- Increased cholesterol levels and/or risk of obesity.

## PFAS in Connecticut

The Connecticut Department of Public Health (DPH) set a Drinking Water Action Level in 2016 for PFAS that was the same as the EPA Health Advisory level of 70 parts per trillion, but DPH also included three additional PFAS (PFNA, PFHxS, PFHpA) to the EPA's group. The sum of this group of five PFAS was to be below the target concentration of 70 parts per trillion. **On June 15, 2022, DPH announced new drinking water action levels for four individual PFAS compounds; another six individual compounds were then added in June, 2023.**

According to DPH: Action Levels, which are non-enforceable, can be used as guidance by health departments and private well owners when evaluating the potability of well water. There are currently no enforceable federal drinking water standards for chemicals in the PFAS family.

All detected PFAS levels in your drinking water were found to be lower than the current U.S.EPA and CT DPH Connecticut Action Levels. Your drinking water is supplied by the Hazardville Water Company with water purchased from the Connecticut Water Company. The Connecticut Water Company has evaluated all their active sources for the presence of these compounds and has voluntarily communicated the results to their customers where these compounds have been detected. Because your drinking water continues to meet, or be better than, all federal and state regulatory standards, there is nothing that you need to do at this time.



## Could There Be Lead or Copper in My Drinking Water?

Lead and copper are unusual among drinking water contaminants in that they seldom occur naturally in water supplies. Lead and copper may enter water supplies by the erosion of natural deposits or by leaching from some wood preservatives; however, the Hazardville Water Company is pleased to announce that there is no lead or copper found in any of the company's 11 wells. The major source of lead and copper entering the water is by corrosion of household plumbing systems that contain lead or copper. These systems include lead and copper service lines (pipes connecting your house to the water main), lead and copper plumbing, and lead based solder used to join copper pipe.

When water stands motionless in plumbing systems that contain lead or copper for several hours, the lead or copper may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

### What is Being Done to Reduce Lead and Copper Corrosion?

The Hazardville Water Company tests for lead and copper every three years in homes that are at a higher risk for containing lead or copper (homes that contain copper pipes joined with lead solder). The last tests took place in 2024. Thirty-nine sites were tested in the Enfield/Somersville section and 6 sites were tested in the Rye Hill, Somers section of HWC's distribution system. No sites in either section exceeded the EPA action level limit of 1.3 parts per million for copper. No sites in the Rye Hill, Somers section exceeded the EPA action level limit of 15 parts per billion for lead. No sites out of the 39 sites in the Enfield/Somersville section exceeded the action level limit for lead.

In order to reduce lead and copper corrosion in the water, HWC adds a food grade compound to the treated water that provides a barrier between the water and the pipes with which it comes in contact.

### Lead, Copper and Your Health:

"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. The Hazardville Water Company is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If You are concerned about lead in your water and wish to have your water tested, contact The Hazardville Water Company at 860-749-0779. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure are available at <http://www.epa.gov/safewater/lead>."

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical and mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink water that contains lead in excess of the action level over many years could develop kidney problems or high blood pressure.

Copper is an essential nutrient, but some people who drink water that contains copper in excess of the action level over a relatively short amount 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.

### Simple Steps to Reduce Exposure to Lead and Copper in Tap Water:

1. Flush your tap - The longer water remains in contact with plumbing materials containing lead and copper, the greater the chance lead or copper will dissolve into the water. Anytime water has gone unused for more than six hours, run each faucet used for drinking or cooking for about a minute or until water becomes cold. Fill a pitcher after flushing the system and refrigerate it for later use. The flushed water may be used for watering houseplants.
2. Use Only Cold Water for Cooking or Drinking – Since hot water lines leach more lead and copper than cold water lines, use cold water for drinking, cooking, making baby formula and mixing juices. If you need hot water for these purposes, heat water on the stove.
3. Remove Loose Lead Solder - Every few months remove the faucet aerator from each faucet in your home and flush the pipes for about 3 – 5 minutes. This will remove any loose lead solder from your plumbing.
4. Be Mindful of Other Lead Sources In or Near Your Home – There are many exposures to lead in the environment, particularly lead-based paint. Children, who are at the highest risk for lead, often come in contact with it in other ways like dirt, dust and paint chips. It is important to wash children's hands and toys often.

## Tips to Protect the Environment

Preventing drinking water contamination at the source makes good public health and environmental sense. You can be aware of the challenges of keeping the drinking water safe and take an active role in protecting the drinking water. The following are ways that you can get involved in drinking water protection activities and help prevent the contamination of ground water sources:

1. Do not dispose of toxic or objectionable liquids or other wastes on the ground, down storm drains or in sewers.
2. Do not dispose of prescription or over the counter medications on the ground, down storm drains or in sewers.
3. Dispose of leftover gasoline and used oil at a recycling or collection center.
4. Dispose of unwanted hazardous products (solvents, cleaning agents, etc.) at hazardous waste collection centers.
5. Use fertilizers, pesticides and herbicides sparingly. Never exceed manufacturers' recommended application rates. Take unwanted quantities to a waste collection center.
6. Regularly inspect septic systems and underground fuel storage tanks.
7. Do not use hazardous products if safer alternatives are available.
8. If hazardous products are to be used, only purchase enough to do the job at hand.
9. Attend public hearings on drinking water and related issues.
10. Support your local water purveyor on issues that protect our environment and our drinking water quality.

## Water Conservation

Water is a limited resource so it is vital that we all work together to maintain it and use it wisely. Here are a few tips you can follow to help conserve:

- Check for leaky toilets (put a drop of food coloring in the tank, after 20 minutes if the water in the bowl turns color, you have a leak). A leaking faucet or toilet can dribble away thousands of gallons of water a year.
- Consider replacing your 5-gallon per flush toilet with an efficient 1.6 gallon per flush unit. This will permanently cut your water consumption by 25%.
- Run only full loads in dishwashers and washing machines. Rinse all hand washed dishes at once.
- Turn off the faucet while brushing teeth or shaving.
- Store a jug of ice water in the refrigerator for a cold drink.
- Water lawn and plants in the early morning or evening hours to avoid excess evaporation. Don't water on a windy, rainy or very hot day.
- Water shrubs and gardens using a slow trickle around the roots. A slow soaking encourages deep root growth, reduces leaf burn or mildew and prevents water loss.
- Apply mulch around flowers, shrubs, vegetables and trees to reduce evaporation, promote plant growth and control weeds. Shrubs and ground covers require less maintenance, less water and provide year-round greenery.
- Be sure that your hose has a shut-off nozzle. Hoses without a nozzle can spout 10 gallons of water or more per minute.
- Be sure sprinklers water only your lawn, not the pavement.
- Never use the hose to clean debris off your driveway or sidewalk. Use a broom.

## Cross Connection Information

A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home. For instance, if you're going to spray fertilizer on your lawn and hook up your garden hose to a sprayer that contains the fertilizer and if the water pressure drops (say because of fire hydrant use) when the hose is connected to the fertilizer sprayer, the fertilizer may be drawn back into the drinking water pipes of your home through the hose. The use of a backflow prevention device can prevent this problem. The Hazardville Water Company recommends the installation of backflow prevention devices, such as a low-cost hose bib vacuum breaker, on all inside and outside hose connections. You can purchase these at a hardware or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system. In addition, **all underground lawn irrigation systems are required to have a pressure vacuum breaker or reduced pressure zone device installed and tested annually** to prevent against the back siphonage of harmful substances. For additional information on cross connections and the status of our cross-connection program, please contact the HWC @ (860) 749-0779.



## Water Service Line Inventory

In 2021, The Environmental Protection Agency (EPA) revised the Lead and Copper Rule (originally promulgated in 1991) to require drinking water utilities to identify water service lines that are either lead or galvanized pipe located downstream of lead service lines, and to develop a replacement plan if they are found. This service line inventory was required to be completed by October 16, 2024. The Hazardville Water Company did complete and submit this initial inventory before the October 16, 2024 deadline.

This inventory indicated that all service lines installed in the RyeHill section of the Hazardville Water Company's distribution system were installed since 1995 and that the company-owned side of the service lines (that portion of the service line that connects the water main to the shut-off valve) are made of copper. The customer-owned side of the service line (that portion of the service line that connects the shut-off valve to the building) are made of either copper or plastic. There are no lead service lines or lead connectors found in the RyeHill system. If you would like more information about your water service line, please call our office at (860)749-0779.

