Chapel Hill Water System Water Quality Report for 2023

Is my drinking water safe?
Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 9 of these contaminants. We found all of these contaminants at safe levels.

What is the source of my water?
Your water, which is ground water, comes from two wells. We purchase some water from the Marshall County Board of Public Utilities which purchases from the Lewisburg Water System. Our goal is to protect our water from contaminants, and we are working with the State to determine the vulnerability of our water source to ***potential*** contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving water to this water system. The SWAP Report assesses the susceptibility of untreated water sources to ***potential*** contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible, or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Chapel Hill Water System sources rated as reasonably susceptible to potential contamination. The water purchased from Marshall County sources is rated as moderately susceptible to potential contamination.
An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at
https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html
or you may contact the Water System to obtain copies of specific assessments.

A wellhead protection plan is available for your review by contacting Water Management at the Chapel Hill Water *System* between 8:00 A.M. to 4:00 P.M. weekdays.

Why are there contaminants in my water?
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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

For more information about your drinking water, please call Water Management at 931-364-7632.

How can I get involved?
Our Water Board meets on the second Monday at 6:00 PM at the Chapel Hill Town Hall . Please feel free to participate in these meetings.

Is our water system meeting other rules that govern our operations?
The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

Other Information
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:

- 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 stormwater 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 synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Do I Need to Take Special Precautions?
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 be particularly at risk from infections. These people should seek advice about not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets 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 (800-426-4791).

Lead in Drinking Water
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. Chapel Hill Water System is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or 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 or at http://www.epa.gov/safewater/lead

Water System Security
Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, tanks, fire hydrants, etc. to 931-364-7632.

Pharmaceuticals In Drinking Water
Flushing unused or expired medicines can be harmful to your drinking water. Learn more about disposing of unused medicines at https://tdeconline.tn.gov/rxtakeback/

W a t e r Q u a l i t y D a t a

What does this chart mean?

- MCLG - Maximum Contaminant Level Goal, or 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.
- MCL - Maximum Contaminant Level, or 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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- MRDL: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the 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 contaminants.
- AL - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- Below Detection Level (BDL) - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- Parts per million (ppm) or Milligrams per liter (mg/l) – explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in $10,000.
- Parts per billion (ppb) or Micrograms per liter - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
- RTCR – Revised Total Coliform Rule. This rule went into effect on April 1, 2016, and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria*** (RTCR)	NO	0		2023		0	TT Trigger	Naturally present in the environment
Turbidity[1]	NO	CH 0.29 MCBPU 0.14	0.02 - 0.29 0.02-0.14	2023	NTU	N/A	TT	Soil runoff
Copper[2]	NO	90TH %= 0.616		2021	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead[2]	NO	90TH %= ND		2021	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	NO	CH 1.47 MCBPU 0.588		2023	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Atrazine	NO	CH ND MCBPU .00139		2023 2023	ppm	3	3	Runoff from herbicide used in row crops.
Total Organic Carbons[3]	NO	TT		2023	ppm	N/A	TT	Naturally present in the environment
Sodium *	NO	CH 5.41 MCBPU 45.5		2022 CH 2023 MCBPU	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment

TTHM [Total trihalomethanes]	NO	5.79 LRAA	** No Range to report.	2023	ppb	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	NO	2.85 LRAA	** No Range to report.	2023	ppb	N/A	60	By-product of drinking water disinfection.
2,4,D*	NO	CH ND - MCBPU 0.23		2023 05/2023	ppb	70	70	Runoff from herbicides used on row crops.
Chlorine	NO	CH Avg,2.08 MCBPU Avg,1.39	0.51– 2.67 0.8– 2.2	2023 2023	ppm	MRDL G4	MRDL 4	Water additive used to control microbes.

MCBPU=Marshall County Board of Public Utilities samples, **CH**=Chapel Hill system samples.
[1]MCBPU: 100% of our samples were below the turbidity limit.
[1]CH: 100% of our samples were below the turbidity limit. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

[2]During the most recent round of Lead and Copper testing, only 0 out of 10 households sampled contained concentrations exceeding the action level.

[3]We met the treatment technique requirements for total organic carbon.

* Chapel Hill samples every 3 years, while Marshall County samples every year.
** We have no "Range of Detection" to report because we only pull 1 (one) sample per year.
*** We are required to collect two coliform bacteria samples from the distribution system each month. The samples are required to be taken on separate days throughout the month. March 2023 the two samples were collected on the same day.

Unregulated Contaminants: (The following sample results are from MCBPU samples.)

Contaminant	Average	Range of Detections	Date of Sample	Unit Measurement
Perfluorobutanesuflonic acid (PFBS)	0.0135	0.0048- 0.034	2023	ppb
Perfluorobutanoic Acid (PFBA)	0.0092	0.0054- 0.013	2023	ppb
Perfluoropentanoic Acid (PFPeA)	0.0095	0.0036- 0.0200	2023	ppb
Perfluorohexanoic Acid (PFHxA)	0.0127	0.0042- 0.0270	2023	ppb
Perfluoropentanoic Acid (PFOA)	0.0091	0.0071- 0.0110	2023	ppb
Perfluorooctanesulfonic Acid (PFOS)	0.0050	System had only one quarter with a detection.	2023	ppb
Perfluoroheptanesulfonic Acid (PFHpS)	0.0038	System had only one quarter with a detection.	2023	ppb

MRL – Minimum Reporting Level is the lowest analyte concentration that meets Data Quality Objectives that are developed based on the intended use of this method.
Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

Important Information About Your Drinking Water
Monitoring requirements not met for
Chapel Hill Water System

We violated a drinking water standard. Even though this was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During March 1, 2023 – March 31, 2023 we did not accurately complete all monitoring requirements for Total Coliform Bacteria and therefore cannot be sure of the quality of our drinking water during that time.

We are required to collect two coliform bacteria samples from the distribution system each month. The samples are required to be taken on separate days throughout the month. During March 2023 the two samples were collected on the same day.

What This Means

There is nothing you need to do at this time. The table below lists the contaminant(s) we did not properly test for, how often we are supposed to sample for it and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Sampled frequency	When all samples should have been taken	When samples were or will be taken
Total Coliform Bacteria	2 per month on different days	2 samples on same day	2 separate days during March 2023	System has since taken samples on separate days.

Steps We Are Taking

[The Chapel Hill Water System has made provisions for sampling to be conducted throughout the monitoring period beginning in April 2023.]

For more information, please contact (Donny Groves) of The Chapel Hill Water Dept. at (931-364-7632) or (4650 Nashville Hwy. Chapel Hill TN. 37047)
Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

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