Henderson Utilities Water Quality Report for 2024

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 100 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 the Memphis Sand Aquifer. 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 Henderson Utility sources rated as reasonably 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 Chris Davis at **Error! Reference source not found.** 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 Chris Davis at 731-989-2646.

How can I get involved?
Our City Board meets on the second Thursday night of each month at 7:00 p.m. 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 under-gone 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).

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 731-989-2646.

Think before you flush!
Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of Tennessee's waterways by disposing in one of our permanent pharmaceutical take back bins. There are nearly 100 take back bins located across the state, to find a convenient location please visit: https://tdeconline.tn.gov/rxtakeback/

Lead in Drinking Water
Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. **Error! Reference source not found.** is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service

line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Henderson Utility 731-989-3503. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

Lead Service Line Inventory

A Lead Service Line Inventory has been completed for our system and is accessible by contacting our office during regular business hours.

Two violations incurred in 2024 They are:

a. The CCR was submitted to DWR late last year. It was due 7/1/24 but received on 7/18/24, resulting in a violation.
b. Electronic delivery of the CCR to customers by 7/1/24 was not met because the link to the CCR listed on water bills last year did not work when checked by DWR on 8/2/24. This resulted in a violation.

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.
- Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.
- 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.
- Millirems per year (mrem/yr) - measure of radiation absorbed by the body.
- Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- 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.
- 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.
- TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

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		2024		0	TT Trigger	Naturally present in the environment
Antimony	NO	<0.1		8/4/20	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic[2]	NO	<0.2		8/4/20	ppb	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	NO	0.032		8/4/20	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium	NO	<0.04		8/4/20	ppb	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium	NO	<0.09		8/4/20	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints

Chromium	NO	<0.4		8/4/20	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	NO	0.0318 90th %	0.0044 0.0585	8/18/23	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide	NO	<4.0		8/4/20	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	NO	0.77 AVG	0.74 0.87	2024	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead[4]	NO	1.3 90th %	0.2 2.9	8/18/23	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Mercury (inorganic)	NO	<0.08		8/4/20	ppb	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel	NO	0.8		8/4/20	Ppb	100	100	
Nitrate (as Nitrogen) [5]	NO	<0.100		6/18/24	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen)	NO	0.2		6/18/24	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	NO	<6.0		8/4/20	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	NO	4.85		3/15/23	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
Thallium	NO	<0.1		8/4/20	ppb	0.5	2	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Alachlor	NO	<0.097		4/6/23	ppb	0	2	Runoff from herbicide used on row crops
Atrazine	NO	<0.068		4/6/23	ppb	3	3	Runoff from herbicide used on row crops
Pentachlorophenol	NO	<0.049		4/6/23	ppb	0	1	Discharge from wood preserving factories
Picloram	NO	<0.1		4/20/20	ppb	500	500	Herbicide runoff
Simazine	NO	<0.049		4/6/23	ppb	4	4	Herbicide runoff
Benzene	NO	<0.5		3/8/23	ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride	NO	<0.5		3/8/23	ppb	0	5	Discharge from chemical plants and other industrial activities

Chlorobenzene	NO	<0.5		3/8/23	ppb	100	100	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene	NO	<0.5		3/8/23	ppb	600	600	Discharge from industrial chemical factories
p-Dichlorobenzene	NO	<0.5		3/8/23	ppb	75	75	Discharge from industrial chemical factories
1,2 - Dichloroethane	NO	<0.5		3/8/23	ppb	0	5	Discharge from industrial chemical factories
1,1 - Dichloroethylene	NO	<0.5		3/8/23	ppb	7	7	Discharge from industrial chemical factories
cis-1,2- Dichloroethylene	NO	<0.5		3/8/23	ppb	70	70	Discharge from industrial chemical factories
trans - 1,2 - Dichloroethylene	NO	<0.5		3/8/23	ppb	100	100	Discharge from industrial chemical factories
Dichloromethane	NO	<0.5		3/8/23	ppb	0	5	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	NO	<0.5		3/8/23	ppb	0	5	Discharge from industrial chemical factories
Ethylbenzene	NO	<0.5		3/8/23	ppb	700	700	Discharge from petroleum refineries
Styrene	NO	<0.5		3/8/23	ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	NO	<0.5		3/8/23	ppb	0	5	Discharge from factories and dry cleaners
1,2,4 - Trichlorobenzene	NO	<0.5		3/8/23	ppb	70	70	Discharge from textile-finishing factories
1,1,1 - Trichloroethane	NO	<0.5		3/8/23	ppb	200	200	Discharge from metal degreasing sites and other factories
1,1,2 - Trichloroethane	NO	<0.5		3/8/23	ppb	3	5	Discharge from industrial chemical factories
Trichloroethylene	NO	<0.5		3/8/23	ppb	0	5	Discharge from metal degreasing sites and other factories
TTHM[6] [Total trihalomethanes]	NO	9.6	9.6	8/13/24	ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	NO	<1.0	<1.0	8/13/24	ppb	N/A	60	By-product of drinking water disinfection.
Toluene	NO	<0.0005		3/8/23	ppm	1	1	Discharge from petroleum factories
Vinyl Chloride	NO	<0.5		3/8/23	ppb	0	2	Leaching from PVC piping; discharge from plastics factories
Xylenes	NO	<0.0005		3/8/23	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MRDLG	MRDL	Likely Source of Contamination
Chlorine	NO	2.02 AVG	1.7-2.2	2024	ppm	4	4	Water additive used to control microbes.

Iron: *Iron occurs naturally in our raw water and occasionally accumulates in the distribution system. Iron shows up as "red" or "rusty" water at your tap. Although you do not want to drink water that is not clear, iron is not considered to be a hazard to your health. We test for iron daily and it is usually around 0.1 ppm. The aesthetic limit for iron is 0.3 ppm.*

During the most recent round of Lead and Copper testing, only 0 out of 20 households sampled contained concentrations exceeding the action level.

[2]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.

[4]Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

[5]Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels 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 you should ask advice from your health care provider.

[6] While your drinking water meets EPA's standard for trihalomethanes, it does contain low levels. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.