



101 Pennsylvania Avenue
Webster, TX 77598



PWS ID #TX1010226 TEXAS

2018

Annual Drinking
Water Quality Report

2018 Annual Drinking Water Quality Report

Our Drinking Water Is Regulated

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Source of Drinking Water

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.

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 at (800) 426-4791.

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 storm water 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 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.

Where Do We Get Our Drinking Water?

The source of drinking water used by the City of Webster is purchased surface water. It comes from the City of Houston. The TCEQ completed an assessment of your source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Shannon Hicks, P.E. Director of Public Works.

All Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Required Additional Health Information for 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. The City of Webster 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>.

For More Information

To learn more about the information included in this report, please contact Shannon Hicks, P.E., at (281) 316-3700.

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (281) 316-3700.



2018 Test Results

We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2018.

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

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the

City of Webster's water department.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

Inorganic Contaminants

Contaminant (Units)	Violation	Collection Date	Level Detected	SCL	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	N	2018	0.0522	1	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	N	2018	0.21	2	4	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen) (ppm)	N	2018	0.41	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Lead and Copper

Contaminant (Units)	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Violation	Likely Source of Contamination
Copper (ppm)	2018	1.3	1.3	0.751	0	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead (ppb)	2018	0	15	3.17	0	N	Corrosion of household plumbing systems; erosion of natural deposits

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 the 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 two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791.

Radioactive Contaminants

Contaminant (Units)	Violation	Collection Date	Highest Single Sample	MCLG	MCL	Likely Source of Contamination
Gross Beta (pCi/L)*	N	2/28/17	4.8	0	50	Decay of natural and man-made deposits

**EPA considers 50 pCi/L to be the level of concern for beta particles.*

Disinfection By-Products

Contaminant (Units)	Violation	Collection Date	Average or Highest Level Detected	Range of Levels Detected	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	2018	30	5.1-34.1	No goal for total	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	2018	33	23.7-47		80	By-product of drinking water disinfection
Chlorine (ppm)	N	2018	2.03	0.55-3.60		50	Water additive used to control microbes.

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.

** The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year.*

** The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year.*

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	0	0	N	Naturally present in the environment.

Synthetic Organic Contaminants (including pesticides and herbicides)

Contaminant (Units)	Violation	Collection Date	Level Detected	MCLG	MCL	Likely Source of Contamination
Atrazine (ppb)	N	2013	0.19	3	3	Runoff from herbicide used on row crops
Di (2-ethylhexyl) phthalate (ppb)	N	2018	<0.6	0	6	Discharge from rubber and chemical factories
Simazine (ppb)	N	2013	0.11	4	4	Herbicide runoff

Regulated Substances

Substance	Year Tested	Average Turbidity (NTU)	Lowest % of monthly samples ≤ 0.3 NTU	MCL	MCLG	Violation (Y/N)	Likely Source of Contamination
Turbidity (NTU)	2018	0.05	100%	TT	NA	N	Soil runoff

Unregulated Contaminants & Secondary Standards

Contaminant (Units)	SCL	MCLG	Level Detected
Chloride (ppb)	250	N/A	33
Copper (ppb)	1	N/A	0.0429
Manganese (ppb)	0.05	N/A	0.0116
pH (SU)	6.5-8.5	N/A	8
Sulfate (ppm)	250	N/A	39
Total Dissolved Solids (ppm)	500	N/A	204
Bicarbonate (ppm)	N/A	N/A	102
Calcium (ppm)	N/A	N/A	44.7
Magnesium (ppm)	N/A	N/A	3.40
Nickel (ppm)	N/A	N/A	0.0031
Potassium (ppm)	N/A	N/A	4.16
Sodium (ppm)	N/A	N/A	21.5
Total alkalinity as CaCO ₃ (ppm)	N/A	N/A	84
Total hardness as CaCO ₃ (ppm)	N/A	N/A	126

Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Definitions

In the table you might find terms and abbreviations with which you are not familiar. To help you better understand these terms we've provided the following definitions:

Action Level (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal (ALG) – the level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Avg. – Regulatory compliance with some MCLs is based on running annual average of monthly samples.

Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL

violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level (MCL) – 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.

Maximum Contaminant Level Goal (MCLG) – 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.

Maximum Residual Disinfectant Level (MRDL) – 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.

Maximum Residual Disinfectant Level Goal (MRDLG) – 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.

mrem – millirems per year (a measure of radiation absorbed by the body).

NA – not applicable.

NTU – Nephelometric Turbidity Units.

Parts per billion (ppb) – micrograms per liter ($\mu\text{g/l}$) or one ounce in 7,350,000 gallons of water.

Parts per million (ppm) – milligrams per liter (mg/l) or one ounce in 7,350 gallons of water.

Secondary Contaminant Level (SCL) – represents reasonable goals for drinking water quality & provides a guideline for public water suppliers.

Treatment Technique (TT) – a required process intended to reduce the level of a contaminant in drinking water.