

HEATHERLOCH MUNICIPAL UTILITY DISTRICT

2021 Drinking Water Quality Report

OUR DRINKING WATER IS SAFE

The Texas Commission on Environmental Quality (TCEQ) has assessed our system and determined that our water is safe to drink. The analysis was made by using the data in the attached tables. As your water meets federal standards set forth by the EPA, there may not be health based benefits to purchasing bottled water or point of use devices.

En Español

Este informe contiene información importante acerca de su agua potable. Para asistencia en español, favor de llamar al telefono: (281) 353-9809

Where do we get our drinking water?

Our drinking water is obtained from ground water and surface water sources. The ground water comes from the Gulf Coast Aquifers some 500 to 2,000 feet below ground surface. Surface water is supplied by the North Harris County Regional Water Authority and is treated water from Lake Houston. 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 will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact Natalia Espitia at (281)353-9809.

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.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or Immuno-compromised persons such as those undergoing chemotherapy for cancer; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from Safe Drinking Water Hotline (800)426-4791.

Contaminants that may be Present in Source Water

The sources of drinking water (both tap 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, and 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; and
- **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, the USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Federal Food and Drug Administration Agency regulations establish limits for contaminants in bottled water that 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 h2o innovation.
EPA website: www.epa.gov/safewater

Public input concerning your water system may be made at regularly scheduled meetings on the third Monday of each month at 5:00 p.m. at 182 Old Bridge Lake, Houston, Texas. You may also contact Natalia Espitia with h2o innovation, at 281-353-9809 with any questions or concerns you may have.



About the Following Table

The following table contains all of the chemical constituents which have been found in your drinking water for the most recent testing performed in accordance with applicable regulations. USEPA requires water systems to test up to 97 constituents. The constituents detected in your water are listed in the attached table.

DEFINITIONS

Maximum Contaminant Level (MCL) - The highest permissible level of a contaminant in drinking water. MCL's are set as close to the MCLG's 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 health risk. MCLG's 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.

ppm = parts per million or milligrams per liter (mg/l), one part per million corresponds to one minute in two years or a single penny in \$10,000.

ppb = parts per billion or micrograms per liter (µg/l), one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

pCi/l = pico curies per liter: Measure of radioactivity.

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

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Inorganic Contaminants							
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2021	Nitrate	1.29	1.29 - 1.29	10	10	ppm	Runoff from fertilizer use.
2018	Nitrite	0.403	<0.01 - 0.403	1	1	ppm	Erosion of natural deposits.
2020	Barium	0.131	0.131 - 0.131	2	2	ppm	Discharge from drilling wastes.
2020	Fluoride	0.13	0.13 - 0.13	4.0	4	ppm	Erosion of natural deposits.
2020	Cyanide	50	50 - 50	200	200	ppb	Discharge from plastic/fertilizer factories.

Organic Contaminants							
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2021	Total Trihalomethanes	15.3	14 - 15.3	80	n/a	ppb	By-product of drinking water chlorination.
2021	Haloacetic Acids (HAA5)	25.0	22.7 - 25.0	60	n/a	ppb	By-product of drinking water chlorination.
2021	Atrazine	0.3	0.3 - 0.3	3	3	ppb	Run off from herbicide used on row crops.
2021	Simazine	0.08	0.08-0.08	4	4	ppb	Herbicide runoff.

Radioactive Contaminants							
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2010	Gross Alpha	3.0	3.0 - 3.0	15	0	pCi/l	Erosion of natural deposits.
2010	Beta Emitters	5.4	5.4 - 5.4	50	0	pCi/l	Erosion of natural deposits.
2016	Combined Radium 226/228	1.5	1.5 - 1.5	5	0	pCi/L	Erosion of natural deposits.

Unregulated Contaminants**

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	Units of Measure
2020	Monochloroacetic Acid	2.0	2.0 - 2.0	ppb
2020	Dichloroacetic Acid	12.5	12.5 - 12.5	ppb
2020	Trichloroacetic Acid	2.8	2.8 - 2.8	ppb
2020	Bromochloroacetic Acid	2.8	2.8 - 2.8	ppb
2021	Chloroform	11.65	8.3 - 15.0	ppb
2021	Bromodichloromethane	2.1	2.0 - 2.2	ppb
2020	Dibromochloromethane	1.15	1.0 - 1.3	ppb

**Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Disinfectant Residual

Year	Constituent	Highest Average	Range of Detected Levels	MCL	MCL G	Units of Measure	Source of Constituent
2021	Chlorine Disinfectant	3.48	0.53 - 3.48	4	0	ppm	Disinfectant used to control microbes.

Lead and Copper

Year	Constituent	The 90th Percentile	Number of Sites Exceeding Action Levels	Action Level	Units of Measure	Source of Constituent
2020	Lead	0.500	0	15	ppb	Corrosion of household plumbing system.
2020	Copper	0.0426	0	1.3	ppm	Erosion of natural deposits.

The 90th percentile of the Lead/ Copper analysis means the top 10% (highest sample results) of all samples collected.

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 supply 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/safe-water/lead>.

During 2021, Heatherloch M.U.D. received surface water from the North Harris County Regional Water Authority. The following is a compilation of the water quality information provided by the North Harris County Regional Water Authority:

Turbidity**

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	Monthly Limits	Units of Measure	Source of Constituent
2021	Turbidity	0.22	0.06 - 0.22	0.3	NTU	Soil runoff.

**Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organism. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Inorganic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2021	Barium	0.0539	0.0539 - 0.0539	2	2	ppm	Erosion of natural deposits.
2021	Nitrate	0.39	0.39 - 0.39	10	10	ppm	Erosion of natural deposits.
2020	Fluoride	0.11	0.11 - 0.11	10	10	ppm	Erosion of natural deposits.

Organic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2021	Atrazine	0.64	0.64 - 0.64	3	3	ppb	Runoff from herbicides used on row crops.
2021	Total Trihalomethanes (TTHM)	48.2	48.2 - 48.2	80	n/a	ppb	By-product of drinking water chlorination.
2021	Haloacetic Acids (HAA5)	51	51 - 51	60	n/a	ppb	By-product of drinking water chlorination.

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

Unregulated Contaminants**

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	Units of Measure
2021	Chloroform	17	17 - 17	ppb
2016	Bromochloroacetic Acid	3.2	3.2 - 3.2	ppb
2016	Dichloroacetic Acid	19.4	19.4 - 19.4	ppb
2016	Monochloroacetic Acid	10.5	10.5 - 10.5	ppb
2016	Trichloroacetic Acid	4.8	4.8 - 4.8	ppb
2021	Bromodichloromethane	2.4	2.4 - 2.4	ppb

**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.