



ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By
Harris County WCID #1



Quality First

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet on the Tuesday following the second Monday of each month at 6:00 p.m. at the Water Office, 125 San Jacinto Street, Highlands.

Source Water Assessment

A source water assessment plan (SWAP) is now available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

Further details about sources and source water assessments are available on Drinking Water Watch at <http://dww2.tceq.texas.gov/DWW/>. Our water system ID number is TX1010159. Baytown Area Water Authority's ID number is TX1011742.

The TCEQ completed an assessment of your source water, and results indicate that some of your 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 Confident Report. For more information on source water assessments and protection efforts at our system, contact Mark Taylor.

Where Do We Get Our Drinking Water?

The source of drinking water for Harris County WCID #1 is purchased surface water blended with 20 percent groundwater from the Chicot Aquifer. Our well sites are located on East Houston Street and North Battlebell Road in Highlands. Purchased water comes from the Trinity River and is processed by Baytown Area Water Authority on Thompson Road.

For more information about your sources of water, please refer to the source water assessment viewer available at <http://www.tceq.texas.gov/gis/swaview>.

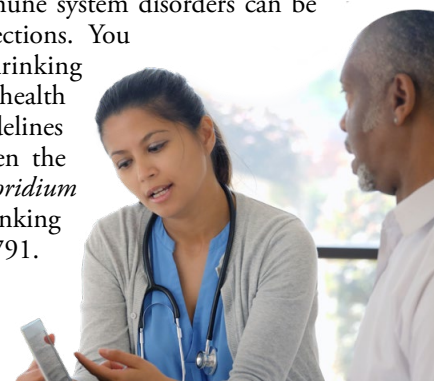
Lead in Home Plumbing

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 we 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 two 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.



Important Health Information

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; 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 the Safe Drinking Water Hotline at (800) 426-4791.



QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Mark Taylor, General Manager, at (281) 426-2115.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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 our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Harris County WCID 1 has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Chapter 30, Section 290, Subchapter F. Even though these were not emergencies, as our customers, you have the right to know what happened and what we are did to correct these situations.

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 January – June 2020 we did not complete all monitoring or testing for Water Quality Parameters and therefore cannot be sure of the quality of your drinking water during that time. During July – December 2020 we made a clerical error, on one of 40 lead copper samples collected during the period.

The table below lists the contaminants we did not properly test for during the last year, how often we are supposed to sample for Water Quality Parameters, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which the follow-up samples were taken.

CONTAMINANT	REQUIRED SAMPLING FREQUENCY	NUMBER OF SAMPLES TAKEN	WHEN SAMPLES SHOULD HAVE BEEN TAKEN	WHEN SAMPLES WERE BE TAKEN
Water quality parameters -Entry Point to the Distribution System	4	2 One at Each Entry Point EP 1 on 1-31-2020, EP 5 on 4-17-2020	Each Entry Point, Both Quarters, January – March and April – June	4 Sampled EP 1 and EP 5, on 9-11- 2020 and 10-26-2020.
Lead and copper tap water sampling	40	40	All samples taken on time but one sample was recorded with the wrong ID Number	The Lab was notified about the mistake on March 18, 2021, they submitted the correction to the TCEQ and DWW has been updated.

What is being done?

We have corrected the problem and returned to compliance on December 10, 2020. For more information, please contact Mark Taylor at 281-246-2115 or 125 San Jacinto, Highlands, TX 77562

Please share this information with all other people who drink this water, especially those who may not have received this notice directly (i.e., 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.

This notice is being sent to you by Harris County WCID 1
Public Water System Number: TX 1010159
Date Distributed: 6-1-2021

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set.

REGULATED SUBSTANCES										
				Harris County WCID #1	Baytown Area Water Authority					
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Atrazine (ppb)	2020	3	3	NA	NA	0.22	NA	No	Runoff from herbicide used on row crops	
Barium (ppm)	2020	2	2	0.0518	NA	0.0453	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Beta/Photon Emitters (pCi/L)	2015	50 ¹	0	NA	NA	5.2	NA	No	Decay of natural and human-made deposits	
Chloramines (ppm)	2020	[4]	[4]	1.89 ²	0.54–3.55	1.34	0.60–3.30	No	Water additive used to control microbes	
Combined Radium (pCi/L)	2016	5	0	1.5	NA	1.5	NA	No	Erosion of natural deposits	
Cyanide (ppb)	2020	200	200	20	NA	NA	NA	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories	
Fluoride (ppm)	2020	4	4	0.68	NA	0.66	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Haloacetic Acids [HAAs] (ppb)	2020	60	NA	26.4 ³	14.6–26.1	7.5	NA	No	By-product of drinking water disinfection	
Nitrate (ppm)	2020	10	10	<0.05	NA	0.93	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Simazine (ppb)	2020	4	4	NA	NA	0.17	NA	No	Herbicide runoff	
Total Coliform Bacteria (positive samples)	2020	TT	NA	0	NA	0	NA	No	Naturally present in the environment	
Total Organic Carbon ⁴ (ppm)	2020	TT	NA	NA	NA	NA	NA	No	Naturally present in the environment	
TTHMs [Total Trihalomethanes] (ppb)	2020	80	NA	30.3 ⁵	19.8–30.3	30.7	NA	No	By-product of drinking water disinfection	
Turbidity ⁶ (NTU)	2020	TT	NA	NA	NA	0.11	0.03–0.11	No	Soil runoff	
Turbidity (lowest monthly percent of samples meeting limit)	2020	TT = 95% of samples meet the limit	NA	NA	NA	100	NA	No	Soil runoff	
Tap water samples were collected for lead and copper analyses from sample sites throughout the community										
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE			
Copper (ppm)	2020	1.3	1.3	0.463	0/40	No	Corrosion of household plumbing systems; Erosion of natural deposits			
Lead (ppb)	2020	15	0	ND	2/40	No	Corrosion of household plumbing systems; Erosion of natural deposits			

SECONDARY SUBSTANCES

				Harris County WCID #1	Baytown Area Water Authority				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
pH (units)	2020	>7.0	NA	8.2	7.3–8.2	7.54	NA	No	Naturally occurring
Zinc (ppm)	2020	5	NA	0.0184	NA	0.07	NA	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED SUBSTANCES⁷

				Harris County WCID #1	Baytown Area Water Authority				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE			
Bromodichloromethane (ppb)	2020	9.9	ND–9.9	9.5	NA	By-product of chlorination			
Chloroform (ppb)	2020	17.5	ND–17.5	19	NA	By-product of chlorination			
Dibromochloromethane (ppb)	2020	3.9	ND–3.9	3.1	NA	By-product of chlorination			
Sodium (ppm)	2020	108	27.7–108	30	NA	Erosion of natural deposits			

¹The MCL for beta particles is 4 mrem/year. U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

²Average for 2020 = 1.89 mg/L.

³Locational running annual average (LRAA) for first quarter 2020 = 25 ppb.

⁴The percentage of TOC removal was measured each month, and the system met all TOC removal requirements.

⁵LRAA for first and fourth quarters 2020 = 27 ppb.

⁶Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

⁷Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 70,631,256 gallons of water. If you have any questions about the water loss audit, please call Harris County WCID #1 at (281) 426-2115.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SCL (Secondary Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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