Special points of interest:

- Special Notice for the Elderly, Infants and Cancer Patients
- Public Participation Opportunities
- 210-661-3198
- www.kirbytx.org to view internet version
- Public Water System ID#0150010

CITY OF KIRBY

2019 Drinking Water Quality Report

Special Notice for the Elderly, Infants, Cancer Patients, people with HIV/AIDS

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 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 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).

OUR DRINKING WATER IS REGULATED

The Texas Commission on Environmental Quality (TCEQ) has assessed our system and determined that our water is safe to drink. This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data in the most recent U.S. EPA required tests and is presented in the attached pages. For more information regarding this report contact Michael Ives @ 210-666-0653 ext.111.

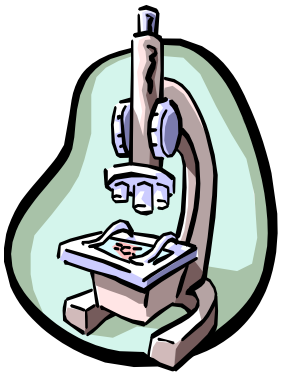
Where do we get the drinking water? Our drinking water is obtained from ground water sources. For more information about your sources of water, refer to the Source Water Assessment Viewer @ https://www.tceq.texas.gov/gis/swaview. The TCEQ completed an assessment of your source water and results indicate 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 Confidence Report . For more information on source water assessments and protection efforts at our system contact Michael Ives @ 210-666-0653 ext. 111. The information contained in the assessment allows us to focus on source water protection strategies. Further details about source water assessments are available in Drinking Water Watch at http://dww2.tceq.texas.gov/DWW/. Source water name: Peppermint/Kirby & 900 Springfield, both are ground water sources. The wells draw their water from the Edwards Aquifer in Bexar County, TX.

Tell us what you think **Public Participation Opportunities**

Date: Every 2nd & 4th Thursday of the month **Time:** 7:00 p.m.

Location: Kirby City Hall, 112 Bauman, Council Chamber **Phone:** 210-661-3198

ALL DRINKING WATER MAY CONTAIN



This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking 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). The TCEQ completed an assessment of your source water and results indicate that our sources have a low susceptibility to contaminants.

EN ESPANOL

Este informe incluye informacion importante sobre el agua para tomar. Para asstencia en espanol, favor de llamar a telefono 210-666-0653 ext. 111, Kirby Public Works.

Water Sources

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 materials, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water includes: 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 & 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 & 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.

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 system's business office.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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 EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

WATER QUALITY TEST RESULTS

DEFINITIONS: The following tables contain scientific terms and measures, some of which may require explanation.
AVG: Regulatory compliance with some MCLs are 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.
MCL (maximum contaminant level) - The highest level of a contaminant 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 not known or expected health risk. MCLGs allow for a margin of safety.
MRDL (Maximum Residual Disinfectant Level) - The highest level of 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 contamination.
mrem/year millirems per year (a measure of radiation absorbed by the body)
na not applicable.
NTU nephelometic turbidity units (a measure of turbidity)
MFL million fibers per liter (a measure of asbestos)
pCi/L picocuri-per liter (a measure of radioactivity)
ppm parts per million, or milligrams per liter (mg/L) or one ounce in 7,350 gallons of water
ppb parts per billion, or micrograms per liter (ug/L) or one ounce in 7,350,000 gallons of water
ppt parts per trillion, or nanograms per liter (ng/L)
ppq parts per quadrillion, or picograms per liter (pg/L)
Treatment Technique (TT): A required process intended to reduce the level of contaminant in drinking water.

Recommended 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 Kirby 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.

Lead and Copper
Definitions:
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.
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

2019 Regulated Contaminants Detected

INORGANIC CONTAMINANTS

Collection	Contaminant	Highest	Range of	MCLG	MCL	Units	Violation	Likely Source of
2017	Fluoride	0.34	0.34-0.34	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2019	Nitrate (measured as Nitrogen)	2	1.3-1.97	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2019	Barium	0.124	0.0955-0.124	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2017	Thallium	0.41	0.41-0.41	0.5	2	ppb	N	Discharge from electronic, glass and Leaching from ore-processing sites

RADIOACTIVE CONTAMINANTS

Collection Date	Contaminant	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
2016	Combined Radium 226/228	1.5	1.5-1.5	0	5	pCi/L	N	Erosion of natural deposits.

DISINFECTANT RESIDUAL TABLE

Year (Range)	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2019	Chlorine Residual, Free	.84	.24	1.31	4	4	ppm	Water additive used to control microbes.

LEAD AND COPPER

Date	Contaminant	MCLG	Action	90th	# OF SITES	Units	Violation	Likely Source of Contamination
2019	Copper	1.3	1.3	0.094	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
2019	Lead	0	15	0.1	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits. plumbing systems; Erosion of natural deposits.

VOLATILE ORGANIC CONTAMINANTS

Collection Date	Contaminant	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
2018	Ethylbenzene	.05	0-0.5	700	700	ppb	N	Discharge from petroleum refineries.
2019	Xylenes	0.0012	0-0.0012	10	10	ppm	N	Discharge from petroleum factories; Discharge from chemical factories.

Disinfection By-Products

Collection Date	Contaminant	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
2018	Haloacetic Acids (HAA5)	3	3.2-3.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

*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.

Collection Date	Contaminant	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
2019	Total Trihalomethanes (TTHM)	1	1.4-1.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

*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.

Violations

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD CONSUMER NOTICE (LCR)	12/30/2019	2019	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results

CODE ENFORCEMENT

To report a Code Violation call *210-547-3560 ext. 203*, email *info@cityofkirby.org* or go online at *www.kirbytx.org* and click on *Report a Problem*.

ONLINE UTILITY & CITATION PAYMENTS

To make an Online Payment go to *www.kirbytx.org* and select *Pay My Bill*.

PAY BY PHONE

To make a utility payment by phone call *833-441-1753* and have your account number available.

PUBLIC NOTICE

The City of Kirby posts important information under the Public Notices section of our website. Visit www.kirbytx.org for regular updates.