

2018 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CITY OF NEW BOSTON

Phone No: 903-628-5596

Annual Water Quality Report for the period of January 1 to December 31, 2018.

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.

For more information regarding this report contact: Billy Martz at 903-628-5596.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 903-628-5596.

Where do we get our drinking water?

The source of drinking water used by CITY OF NEW BOSTON is Purchased Surface Water. It comes from the following Lake/River/Reservoir/Aquifer: Wright Patman (Bowie County, Texas).

Sources 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.

SPECIAL NOTICE:

In order to ensure that tap water is safe to drink, EPA prescribes 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.

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, color of drinking water, please contact the system's business office.

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; 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 see 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).

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. We are 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 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>.

Information about Source Water Assessments

City of New Boston purchases water from Texarkana Water Utilities. Texarkana Water Utilities provides surface water from Lake Wright Patman located in Bowie County and Lake Millwood located in Miller County.

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact Billy Martz (903) 628-5596.

Source Water Name	Type of Water	Report Status	Location
SW FROM TEXARKANA	I/C WITH TX0190004	SW	Lake Millwood - Miller County, Arkansas
SW FROM TEXARKANA	I/C WITH TX0190004	SW	Lake Wright Patman - Bowie County, Texas

Definitions - The following tables on back of this form contain scientific terms and measures, some of which may require explanation.

ADH - Arkansas Department of Health

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

TCEQ: Texas Commission on Environmental Quality

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

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

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 or 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 or 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 or 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 or 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.

MFL million fibers per liter (a measure of asbestos)

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

na not applicable

NTU Nephelometric Turbidity Unit - a unit of measurement for the clarity 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 micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. A unit of measurement for detected levels of contaminants in drinking water.

One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

ppm parts per million - milligrams per liter or parts per million - or once ounce in 7,350 gallons of water. A unit of measurement for detected levels of contaminants in drinking water. One part per million corresponds to one minute in two years or a single penny in \$10,000.

ppt parts per trillion, or nanograms per liter (ng/L)

ppq parts per quadrillion, or picograms per liter (pg/L)

Treatment Technique or TT - A required process intended to reduce the level of a contaminant in drinking water.

TWU - Texarkana Water Utilities

Microbiological Contaminants

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Contaminant	Highest Monthly % of positive samples	MCL	Unit of Measure	Source of Contaminant
Total Coliform Bacteria	1.60%	Presence of coliform bacteria in 5% of monthly samples	Presence	Naturally present in the environment

Turbidity

Turbidity is a measure of the cloudiness of the water. It is used to indicate water quality and filtration effectiveness (e.g., whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing microorganisms such as viruses, parasites and some bacteria. These organisms can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Contaminant	Location	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
Turbidity	Wright Patman	0.32	100%	≤0.3 in 95% of samples	NTU	Soil runoff
	Millwood	0.29	100%			

Cryptosporidium

Cryptosporidium is a tiny intestinal parasite found naturally in the environment. It is spread by human and animal waste. If ingested, cryptosporidium may cause cryptosporidiosis, an abdominal infection (symptoms include nausea, diarrhea, and abdominal cramps). Some ways cryptosporidium can be spread include drinking contaminated water, eating contaminated food that is raw or undercooked, exposure to the feces of animals or infected individuals (i.e. changing diapers without washing hands afterward), or exposure to contaminated surfaces. Not everyone exposed to the organism becomes ill. During 2018, Texarkana tested for cryptosporidium in both untreated and treated water. It has only been found in the untreated water supply. **Cryptosporidium has not been found in Texarkana's treated drinking water.** Texarkana works to protect the watershed from contamination and optimizes the treatment process. Although Texarkana's water treatment process removes cryptosporidium, immuno-compromised persons should consult their physician regarding appropriate precautions to avoid infection.

Contaminant	Location	Average Level Detected	Range of Detected Level	Unit of Measure	Source of Contaminant
Cryptosporidium	Wright Patman untreated water	0.1	0.1 - 0.1	oocysts/L	Human and animal fecal waste

Inorganic Contaminants

Contaminant	Reporting Agency	Average Level Detected	Range of Detected Level	MCL	MCLG	Unit of Measure	Source of Contaminant
Nitrate (as Nitrogen)	TCEQ	0.167	0.0336 - 0.3	10	10	ppm	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits
	ADH	0.1	0.1 - 0.1				
Barium	TCEQ	0.034	0.014 - 0.054	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
	ADH	0.0162	0.0142 - 0.0182				
Fluoride	TCEQ	0.0379	0.0218 - 0.0539	4	4	ppm	promotes strong teeth; discharge from fertilizer and aluminum factories.

Contaminant	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Source of Contaminant
Nitrate (as Nitrogen)	08/06/2018	0.146	0.137 - 0.146	10	10	ppm	N	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits

Organic Contaminants

2,4-D	ADH	0.29	0.29 - 0.29	70	70	ppb	Runoff from herbicide used on row crops.
Picloram	ADH	0.12	0 - 0.24	500	500	ppb	Herbicide runoff.

Radioactive Contaminants (2016 Sample Results)

Combined Radium (226 + 228)	ADH	1.5	1.5 - 1.5	5	0	pCi/L	Erosion of natural deposits
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Lead & Copper Tap Monitoring

Contaminant	Date Sampled	MCLG	Action Level (AL)	The 90th Percentile	# Sites over AL	Unit of Measure	Violation	Source of Contaminant
Lead	08/08/2016	0	15	1.4	0	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits
Copper	08/08/2016	0	1.3	0.022	0	ppm	N	

Disinfectant Residual

Contaminant	Year	Annual Average	Range of Detected Level	MRDL	MRDLG	Unit of Measure	Violation	Source of Contaminant
Chlorine (total)	2018	2.25	0.7 - 3.5	4	4	ppm	N	Water additive used to control microbes

Disinfection By-Products

Contaminant	Year	Highest Locational Running Annual Average	Range of Detected Level	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
Total Trihalomethane (TTHM)	2018	47	21.6 - 51.7	80	No goal for the total	ppb	N	By-product of drinking water disinfection
Haloacetic Acid (HAA5)	2018	29	9.2 - 41.1	60	No goal for the total	ppb	N	By-product of drinking water disinfection

Unregulated Contaminants

Unregulated contaminants are those for which the 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 further regulation is warranted. MCLs (Maximum Contaminant Levels) and MCLGs (Maximum Contaminant Level Goals) have not been established for all unregulated contaminants.

Contaminant	Reporting Agency	Level Detected Range	Avg. Level Detected	Unit of Measure	MCLG	Source of Contaminant
Chloroform	TCEQ	26.2 - 33.5	29.85	ppb	70	By-products of drinking water disinfection
	ADH	28.6 - 28.6	28.60			
Bromodichloromethane	TCEQ	9.45 - 12.1	10.78	ppb	0	
	ADH	10.8 - 10.8	10.80			
Dibromochloromethane	TCEQ	2.87 - 3.69	3.28	ppb	60	
	ADH	2.47	2.47			
Acetone	TCEQ	6.16 - 6.88	6.52	ppb	6000	Used in manufacture of plastic, fibers, cosmetics, photographic film and many other kinds of consumer goods.
Methyl ethyl ketone	TCEQ	0.89 - 1.02	1.00	ppb	None	A solvent used in the synthetic rubber industry, in the production of paraffin wax and in household products such as lacquers, varnishes, paint remover and glues.