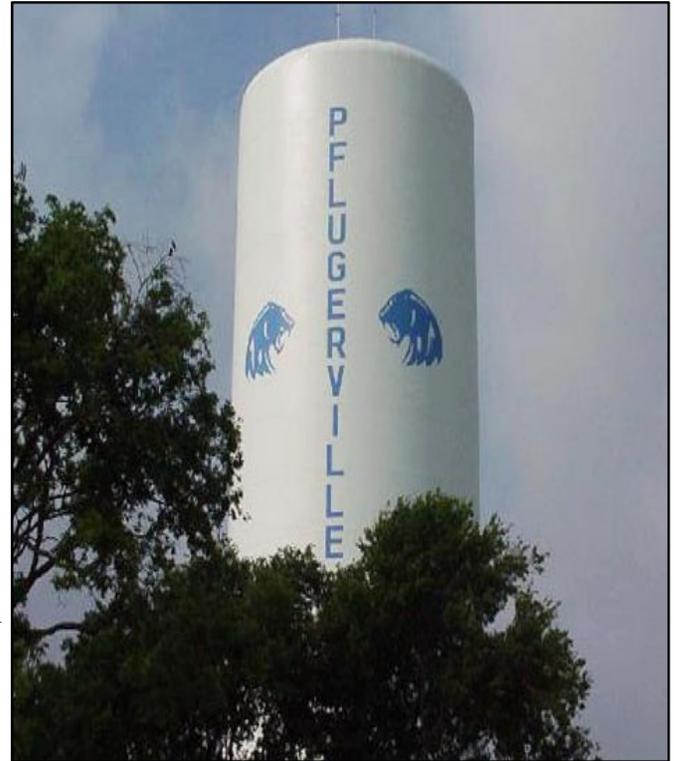


2015 Pflugerville Utility Department

Drinking Water Quality Report City of Pflugerville

The City of Pflugerville provides our water customers an annual water quality report to show the source of your water, test results and information on water and health. The information is provided to highlight improvements necessary to maintain Pflugerville's drinking water standards. The report reflects the hard work of our employees to protect your health by producing, delivering and maintaining safe and reliable drinking water. In this report, you will find data based on 2015 testing.

Our Drinking Water is Safe The Pflugerville Public Works Department employees take pride in delivering safe and superior quality drinking water to you. The Texas Commission on Environmental Quality (TCEQ) assessed our system using the data enclosed in this document, and our water is not only safe to drink, but it was given the highest possible ranking of "Superior."



1.5 million gallon tank at The Club.

Public Interest:

The City of Pflugerville Public Works Department encourages public interest and participation in our community's decisions affecting drinking water. Regular City Council meetings occur on the second and fourth Tuesday of every month at City Hall, 100 E Main St., Suite 500 at 7 p.m.

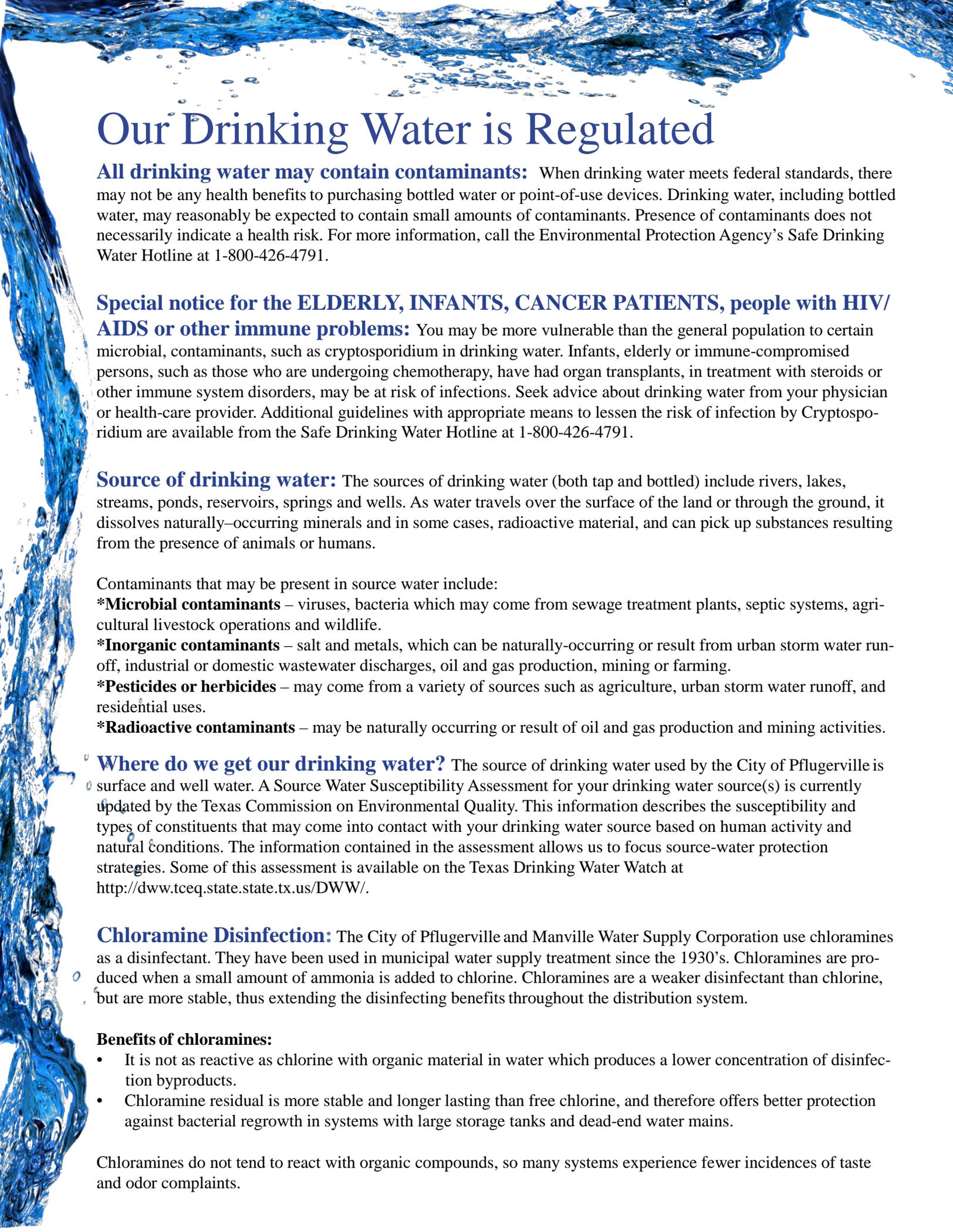
Pf Connect Notification: Boil Water Notices / Emergency Alerts

The city uses Facebook, Twitter, Nixle (a text-messaging alert system), street signs and the news media to announce boil water notices. You are encouraged to sign up to receive text alerts if there is ever a boil water notice in your neighborhood. Text PFPD to 888777 to sign up for Pflugerville emergency texts or visit www.pflugervilletx.gov/connect to pick your way to receive information from the city.

En Español Este reporte incluye informacion importante sobre el agua para tomar. Para obtener una copia de esta informacion traducida al Espanol, favor de llamar a telefono 512-990-6100.



City of Pflugerville Public Works
15500 Sun Light Near Way #B
512-990-6400 <http://www.pflugervilletx.gov/publicworks>



Our Drinking Water is Regulated

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 small amounts of contaminants. Presence of contaminants does not necessarily indicate a health risk. For more information, call the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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, elderly or immune-compromised persons, such as those who are undergoing chemotherapy, have had organ transplants, in treatment with steroids or other immune system disorders, may be at risk of infections. Seek advice about drinking water from your physician or health-care provider. Additional guidelines with appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Source of drinking water: The sources of drinking water (both tap and bottled) 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 humans.

Contaminants that may be present in source water include:

- ***Microbial contaminants** – viruses, bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- ***Inorganic contaminants** – salt 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 or herbicides** – may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- ***Radioactive contaminants** – may be naturally occurring or 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 Pflugerville is surface and well water. A Source Water Susceptibility Assessment for your drinking water source(s) is currently updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activity and natural conditions. The information contained in the assessment allows us to focus source-water protection strategies. Some of this assessment is available on the Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>.

Chloramine Disinfection: The City of Pflugerville and Manville Water Supply Corporation use chloramines as a disinfectant. They have been used in municipal water supply treatment since the 1930's. Chloramines are produced when a small amount of ammonia is added to chlorine. Chloramines are a weaker disinfectant than chlorine, but are more stable, thus extending the disinfecting benefits throughout the distribution system.

Benefits of chloramines:

- It is not as reactive as chlorine with organic material in water which produces a lower concentration of disinfection byproducts.
- Chloramine residual is more stable and longer lasting than free chlorine, and therefore offers better protection against bacterial regrowth in systems with large storage tanks and dead-end water mains.

Chloramines do not tend to react with organic compounds, so many systems experience fewer incidences of taste and odor complaints.

City of Pflugerville Surface Water Regulated at the Treatment Plant

PARAMETER	MCL	MCLG	DATE	AVG Result	High	Low
Fluoride (ppm)	2	2	2015	0.26	0.29	0.24
Nitrate (as N) (ppm)	10	10	2015	1.10	2.09	0.12
Turbidity (ntu)	0.3	NA	2015	0.09	0.27	0.01

99.5% of all reading below 0.3 NTU

Turbidity - 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 organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples meeting limits	Turbidity Limits	Unit of Measure	Contaminant Source
2015	Turbidity	0.27	99.5	0.3	NTU	Soil runoff

The TOC removal ratio is the percent of TOC removed through the treatment process divided by the percent of TOC required by TCEQ to be removed. TCEQ requirement is to have a running annual average equal to or greater than 1.

Total Organic Carbon Disinfection byproducts regulated at treatment plant - Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA), reported elsewhere in this report.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Units of Measure	Source of Contaminant
2015	Raw Water TOC	4.15	3.10	7.90	ppm	Naturally present in environment
2015	Finished Water TOC	3.12	2.10	5.10	ppm	Naturally present in environment
2015	Present Removal	22.7	2.94	40.00	% removal	NA
2015	Total Hardness	161	116	218	mg/L	Naturally present in environment

Cryptosporidium Monitoring Information - The City started monitoring for cryptosporidium in June of 2008. We collect one sample per month and all samples have been negative. Cryptosporidium is a microbial parasite that may be commonly found in surface water. It may come from animal or human feces in the watershed. The results of our monitoring indicate there may be cryptosporidium in the raw water and/or treated finished water. Although treatment by filtration removes cryptosporidium, it cannot guarantee 100% removal. The testing methods used cannot determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

Year	Contaminant	Oocysts	Cysts
2015	Cryptosporidium	0	NA
2010	Giardia	NA	0

Regulated in the Distribution System

PARAMETER	MCL	MCLG	DATE	AVG Result	High	Low
Haloacetic Acids HAA5 (ppb)	60 AVG	NA	2015	6.12	11.4	< 6.0
Total Trihalomethanes (ppb)	80 AVG	NA	2015	11.88	23.0	<4.0

Regulated Disinfectant

PARAMETER	MRDL	MRDLG	DATE	AVG Result	High	Low
Chloramines (ppm)	4	4	2015	1.50	3.40	0.50

Total Coliform - 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 capable of causing disease. *Presence of coliform bacteria in 5% or more of the monthly samples.

Year	Contaminant	Highest Monthly % of positive samples	MCL	Unit of Measure	Contaminant Source
2015	Total Coliform Bacteria	2	*	Presence	Naturally present in environment

Fecal coliform - Reported Monthly Tests Found NO Fecal Coliform Bacteria

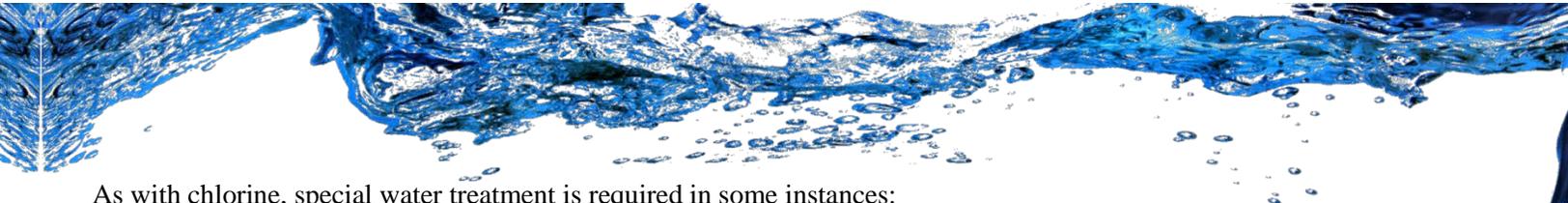
VIOLATIONS: N/A

Year	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Level	Unit of Measure	Source of Constituent
2015	Aluminum	0.02	0.02	0.02	0.05	ppm	Abundant naturally occurring element, Corrosion of carbonate rock such as limestone
2015	Bicarbonate	253.5	176	331	NA	ppm	Abundant naturally occurring element
2015	Calcium	44.5	44.5	44.5	NA	ppm	Abundant naturally occurring element
2015	Chloride	40.5	37	44	300	ppm	Abundant naturally occurring element, used in water purification, byproduct of oil field activity
2015	Hardness as Ca/Mg	161	116	218	NA	ppm	Naturally occurring calcium and magnesium
2015	pH	7.7	7.4	8.0	7	units	Measures of corrosivity of water
2015	Sodium	26.3	26.3	26.3	NA	ppm	Erosion of natural deposits, byproduct of oil field activity
2015	Sulfate	38.5	35	42	300	ppm	Naturally occurring, common industrial byproducts, byproduct of oil field activity
2015	Total Alkalinity	207.5	144	271	NA	ppm	Naturally occurring soluble mineral salts
2015	Total Hardness	161	116	218	NA	ppm	Naturally occurring calcium & magnesium
2015	Total Dissolved	320.5	253	388	1000	ppm	Total dissolved mineral constituents in water
2015	Zinc	0.03	0.03	0.03	5	ppb	Moderately abundant naturally occurring element, used in the metal industry

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Synthetic Organic Contaminants Including Pesticides

Year	Constituent	Highest Level Detected	Ranges of Detection	MCLG	MCL	Units	Likely Source of Contamination
2015	Chlordane	<0.20	<0.20	0	2	ppb	Residue of banned termiticide
2015	Endrin	<0.01	<0.01	2	2	ppb	Residue of banned insecticide
2015	Heptachlor epoxide	<0.02	<0.02	0	200	ppt	Breakdown of heptachlor
2015	Toxaphene	<1.0	<1.0	0	3	ppb	Runoff from insecticides used on cotton & cattle



As with chlorine, special water treatment is required in some instances:

- **Kidney dialysis** - Medical centers performing dialysis are responsible for purifying the water that enters dialysis machines. Persons with home dialysis machines should check with their physician or equipment supplier.
- **Aquatic life** - Chloramines stay in the water for several weeks, so a de-chlorinating agent should be added to remove it.
- **Rubber** - Rubber linings of water lines may deteriorate over time.

Persons with kidney ailments, diabetes or low-sodium diets can drink or use chloraminated water for all purposes. It is safe to water any type of plant, including ornamentals, vegetables, fruit and nut trees.

Important information on additional chemicals:

Arsenic (above 25 ug/l but below the MCL) - The Environmental Protection Agency (EPA) is reviewing the drinking water standards for Arsenic due to concerns it may not be stringent enough. Arsenic is a naturally-occurring mineral known to cause cancer in humans at high concentrations.

Nitrate (5 mg/l, but below the MCL) - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, seek advice from your health care provider.

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. Your water supplier is responsible for high-quality drinking water but cannot control the variety of materials used in plumbing components. If 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. Safe Drinking Water Hotline 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Coliforms - Coliform bacteria are used as indicators of microbial contamination of drinking water because they are easily detected and found in the digestive tract of warm-blooded animals. While not disease producers, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are hardier than many disease-causing organisms; therefore their absence from water is a good indication that the water is bacteriologically safe for human consumption. Fecal coliform (mostly E-coli), is a portion of the coliform bacteria originating in the intestinal tract of warm-blooded animals that passes into the environment as feces. Fecal coliform is often used as an indicator of the fecal contamination of domestic water supply.

Total Coliform - The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. The city complies with all regulations.

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. Since these constituents are not causes for health concerns, secondary constituents are not required to be reported in this document, although they may affect the appearance and taste of your water.



Understanding provided tables and information:

The attached table contains all of the constituents which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents. The table contains the name of each constituent, the highest level allowed by regulation (MCL); the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings and a key to units of measurement.

Abbreviations

NTU- Nephelometric Turbidity Units

pCi/L- picocuries per liter (a measure of radioactivity)

ppb- parts per billion or micrograms per liter

ppq- parts per quadrillion or pictograms per liter

MFL- million fibers per liter (a measure of asbestos)

ppm- parts per million or milligrams per liter (mg/L)

ppt- parts per trillion or nanograms per liter

Definitions The following tables contain scientific terms and measures, some of which may require explanation.

Maximum Contaminant Level Goal (MCLG) - The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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 residual disinfectant level (MRDLG) - The level of a drinking water disinfectant below which there is a known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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 the control of microbial contaminants.

AVG - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ppm - milligrams per liter or part per million- or one ounce in 7,350 gallons of water.

ppb - micrograms per liter or parts per billion- or one ounce in 7,350,000 gallons of water.

na - not applicable

Inorganic Contaminant

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Contaminant Source
2015	Arsenic	< 0.002	< 0.002	< 0.002	10	2	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
02015	Barium	0.0549	0.0549	0.0549	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries, erosion of natural deposits.
2015	Combined Radium 226 & 228	<1.0	<1.0	<1.0	5	0	pCi/L	Erosion of natural deposits.
2015	Gross beta emitters	<4.0	<4.0	<4.0	50	0	pCi/L	Decay of natural and man-made deposits.
2015	Gross alpha	< 3.0	< 3.0	< 3.0	15	0	pCi/L	Erosion of natural deposits.

Organic Contaminant

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Contaminant Source
2015	Atrazine	0.10	< 0.1	0.10	3	3	ppb	Runoff from herbicides used on row crops

Maximum Residual Disinfectant Level

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Contaminant Source
2015	Chloramine Residual	1.50	0.5	3.40	4	4	ppm	Disinfectant used to control microbes

Disinfection Byproducts Entry Points

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Contaminant Source
2015	Total Halo acetic acids	6.12	< 6.0	11.4	60	ppb	Byproduct of drinking water disinfection
2015	Total Trihalo-methanes	11.88	< 4.0	23.0	80	ppb	Byproduct of drinking water disinfection

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts - This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acid in the systems for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA requires the data to be reported here.

Unregulated Contaminants / Proposed Standards Bromoform, chloroform, dichlorobromomethane and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Contaminant Source
2015	Chloroform	3.52	<1.0	5.7	ppb	Byproduct of drinking water disinfection
2015	Bromoform	1.50	<1.0	2.5	ppb	Byproduct of drinking water disinfection
2015	Bromodichloromethane	4.48	<1.0	7.5	ppb	Byproduct of drinking water disinfection
2015	Dibromochloromethane	3.61	1.0	7.6	ppb	Byproduct of drinking water disinfection

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of sites Exceeding Action Levels	Action Level	Unit of Measure	Contaminant Source
2013	Lead	0.0019	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2013	Copper	0.053	0	1.3	ppm	Corrosion of household plumbing systems, erosion of natural deposits. Leaching from wood preservatives.

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. This water supply 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 concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps to minimize exposure is available on the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.



Pflugerville Water Conservation Schedule

A reminder that Pflugerville is under Stage II Twice a Week Water Conservation Schedule.

Twice a week watering schedule is as follows:

Addresses ending with an **odd** number water on: **Wednesday and Saturday**

Addresses ending with an **even** number water on: **Thursday and Sunday**

Commercial, Industrial, and Institutional Properties water on: **Tuesday and Friday**

No Watering Allowed on Mondays

Hand Watering is allowed any day before 10 am or after 7 pm when watering with a hand-held positive shutoff nozzle. Car washing is allowed on your designated watering day or at commercial car washes.

The restrictions allow watering of lawns, landscapes and foundations, but only on your designated days and before 10 a.m. or after 7 p.m. Filling or refilling of indoor or outdoor swimming pools is allowed on your designated watering day during designated watering hours.

<http://www.pflugervilletx.gov/conservation>

