



# 2016 DRINKING WATER QUALITY REPORT

Consumer Confidence Report

January 1—December 31, 2016

## Greetings and Salutations!

The City of Temple is dedicated to providing an adequate supply of safe and reliable drinking water to its customers and visiting consumers. Capital improvements and upgrades are underway at the water treatment plant and throughout the distribution system, for continued support of current demand along with rapid growth and development experienced across many parts of the City. Water conservation plays an important role in the protection of the City's most precious natural resource. Let's always be "water smart", and remember to use water wisely, turning off faucets and reporting water leaks to (254) 298-5611 when they are observed. Our citizens are the best "eyes and ears" the system has. We want to say a big "thank you" to our citizens that call in to inform the department of utility needs or issues.



*Yours in Service,*

*Damon B. Boniface, Utility Director*

## City of Temple Source Water & Source Water Assessment



The source of drinking water for the City of Temple is Surface Water which comes from the Leon River, south of Lake Belton and is located within the Brazos River Basin. The TCEQ completed an assessment of the City of Temple's source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our 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 the City of Temple, contact the Water Treatment Plant at (254) 298-5940.

For more information about your sources of water, please refer to the Source Water Assessment Viewer <http://www.tceq.texas.gov/gis/swaview>

Further details about sources and source-water assessments are available in Drinking Water Watch at <http://dww2.tceq.state.tx.us/DWWW/>

## Why Did I Receive This Report?

In 1996, Congress amended the Safe Drinking Water Act to include a requirement that water utilities annually notify customers about their drinking water quality. The law is very specific regarding delivery methods and what information must be included. The law requires water suppliers make a good effort to distribute this report to its citizens. This report may also be seen at local City facilities to ensure that the citizens of Temple are educated on the quality of potable drinking water provided by the City's water utility. If you have any questions about information contained in this report please contact the City's Water Treatment Plant at (254) 298-5940.

To participate in the public process, regular City Council meetings occur on the 1st and 3rd Thursday of each month at 5 p.m., at Temple's City Hall, located at 2 N. Main Street. Meetings are open to the public.

For information regarding this report, contact:

**City of Temple—Water Treatment Plant**

(254) 298-5940

{ Este reporte incluye informacion importante sobre el agua para tomar.  
Para asistencia en espanol, favor de llamar al telefono (254) 298-5940. }



In order to ensure tap water is safe to drink, 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.

## Drinking Water Information



*\*The following information is for awareness purposes.  
The exact wording shown below is required by state regulations.*

The sources of drinking water (both tap & 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.

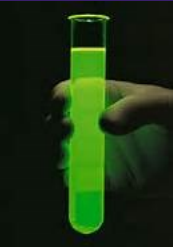
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- \* Microbial contaminants—viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations & wildlife.
- \* Inorganic contaminants—salts and metals, which can be naturally-occurring or result from urban storm water runoff, wastewater discharges, oil/gas production, mining or farming.
- \* Pesticides & herbicides—which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- \* Organic Chemical contaminants—synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production.
- \* Radioactive contaminants—naturally occurring or result of oil/gas production 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 Water Treatment Plant at 254-298-5940.

## Immunocompromised Persons Advisory



You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immune-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 health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the EPA Safe Drinking Water Hotline. (1-800-426-4791).

## Water Quality Test Results: Definitions

- \* **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- \* **Maximum Contaminant Level (MCL):** The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs 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. MCLGs allow for a margin of safety.
- \* **Maximum Residual Disinfectant Level (MRDL):** 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.
- \* **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of 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.
- \* **NA:** Not applicable
- \* **NTU:** Nephelometric Turbidity Units pCi/L: picocuries per liter (a measure of radioactivity)
- \* **ppm:** parts per million, or milligrams per liter (mg/L)
- \* **ppb:** parts per billion, or micrograms per liter (ug/L)
- \* **pCi / L:** Picocuries per liter; a measure of radioactivity
- \* **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- \* **uS / m:** Microseimens per meter; unit of electrical conductance



## Page 3 Water Quality Test Results

Substance (Units)	Sample Year	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Possible Source
<b>Turbidity</b>							
Turbidity (NTU)	2016	N/A	99%	0.3	Treatment Technique	100%	Soil runoff
<b>Inorganics</b>							
Fluoride (ppm)	2016	0.17	0.17	0.17	4.0	4.0	(1)
Nitrate as Nitrogen (ppm)	2016	.75	.75	.75	10.0	10.0	(2)
Combine radium (pCi/L)	2011	0.10	0.10	0.10	5.0	0.00	Erosion of natural deposits
Atrazine (ppm)	2015	0.00011	0.00011	0.00011	0.003	0.003	Agricultural Runoff
<b>Coliform Bacteria</b>							
Total Coliform bacteria (presence in 5% of samples collected)	2016	NA	0.00%	0.00%	5.00%	0.00%	Naturally present in the environment
<b>Disinfection Residual</b>							
Chloramines (ppm)	2016	2.5	0.50	4.90	4.00 (5)	4.00 (5)	Water additive used to control microbes
<b>Disinfection Byproducts</b>							
Total Trihalomethanes (ppb)	2016	92.39	64.1	144	80 (5)	NA	By product of water disinfection
Total Haloacetic Acids (ppb)	2016	43.49	21.6	82.10	60 (5)	NA	By product of water disinfection
<b>Total Organic Carbon</b>							
Source Water (ppm)	2016	4.78	3.88	6.22	NA	NA	Naturally present in the environment
Drinking Water (ppm)	2016	3.61	2.30	4.47	NA	NA	
Removal Ratio (TT)	2016	1.27	0.80	2.71	NA	NA	
<b>Unregulated Contaminants (6)</b>							
Chloroform (ppb)	2016	37.6	17.6	65.7	NA	NA	By product of water disinfection
Bromoform (ppb)	2016	2.8	1.1	5.0	NA	NA	
Bromodichloromethane (ppb)	2016	32	22	52	NA	NA	
Dibromochloromethane (ppb)	2016	20	14	28	NA	NA	
<b>Secondary &amp; Other Unregulated Constituents</b>							
Bicarbonate Alkalinity (ppm)	2016	176.0	176.0	176.0	NA	NA	Erosion of limestone
Total Alkalinity (ppm)	2016	150.0	150.0	150.0	NA	NA	Natural soluble minerals/salts
Chloride (ppm)	2016	28.0	28.0	28.0	300	NA	Naturally occurring element
Conductivity (uS/m)	2016	438.0	438.0	438.0	NA	NA	Electrical property of water
pH (pH units)	2016	7.3	7.0	7.0	>7.0	NA	Measure of corrosivity
Sodium (ppm)	2016	15.0	15.0	15.0	NA	NA	Erosion of natural deposits
Sulfate (ppm)	2016	20.0	20.0	20.0	300	NA	Naturally occurring compounds
Total Dissolved Solids (ppm)	2016	234	234	234	1000	NA	Total dissolved mineral constituents
<b>Lead and Copper</b>	<b>Year</b>	<b>(3)</b>	<b>(4)</b>	<b>Action Level</b>	<b>Violation?</b>		
Copper (ppm)	2016	0.21	.095	.039	No		Corrosion of household plumbing and erosion of natural deposits
Lead (ppb)	2016	.0027	.0010	.0250	No		

(1) Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

(2) Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

(3) 90<sup>th</sup> percentile value

(4) Sites exceeding action level

(5) Running Annual Average

(6) Unregulated contaminants are those for which the 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 regulations are warranted.

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>.

Substance (Units)	Sample Year	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Possible Source
<b>Metals Analysis</b>							
Aluminum (ppm)	2016	0.0383	0.0383	0.383	NA	NA	Erosion of natural deposits
Barium (ppm)	2016	.0645	.0645	.0645	0.006	0.006	Industrial sources
Calcium (ppm)	2016	54.6	54.6	54.6	2.0	2.0	Erosion of natural deposits
Copper, Free (ppm)	2015	.0350	.0350	.0350	NA	NA	Erosion of natural deposits
Hardness, Calcium and Magnesium (ppm)	2015	185	185	185	NA	NA	Erosion of natural deposits
Iron (ppm)	2016	.017	.017	.017	NA	NA	Erosion of natural deposits
Magnesium (ppm)	2016	7.66	7.66	7.66	NA	NA	Erosion of natural deposits
Manganese (ppm)	2016	.0014	.0014	.0014	NA	NA	Erosion of natural deposits
Nickel (ppm)	2016	.0018	.0018	.0018	NA	NA	Erosion of natural deposits
Potassium (ppm)	2016	5.37	5.37	5.37	NA	NA	Erosion of natural deposits
Sodium (ppm)	2016	15	15	15	NA	NA	Erosion of natural deposits

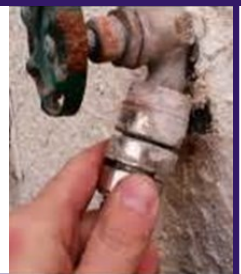
The Texas Commission on Environmental Quality (TCEQ) has notified the **CITY OF TEMPLE TX0140005**:

- 1.The drinking water being supplied to customers had exceeded the maximum contaminant level (MCL) for total trihalomethanes (TTHMs) for all . The U.S. Environmental Protection Agency (U.S. EPA) has established the MCL for total trihalomethanes to be 0.080 milligrams per liter (mg/L) based on locational running annual average (LRAA), and has determined that it is a health concern at level above the MCL. Some people who drink water containing trihalomethanes in excess of the MCL at a rate of approximately 2 liters per day over a period of 70 years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Changes made to the treatment process continue to show sample results below the MCL, with anticipated compliance in 3rd Quarter 2017.
- 2.The system collected 29 of the required 30 samples for lead and copper monitoring, for monitoring period January 1, 2013 thru December 31, 2015. The City immediately resolved this violation by collecting the required 30 samples, revised standard operating procedures, and issued the notification of violation to the citizens. The City has always and continues to comply with MCL requirements per the U.S. EPA Lead and Copper Rule for drinking water.

“The safety of the City’s drinking water is always a primary focus and it has always been safe to drink”.



The City of Temple takes great pride in delivering quality drinking water to every service tap. Are you doing your part to protect it from potential contamination once it arrives at your home or business? A simple method to eliminate the most common cross-connection is to install hose bibb vacuum breakers. These devices should be attached to any and every hose spigot that is on your property to protect against potential backsiphonage of contaminants in the event of a significant drop in system pressure. Thank you for contributing to the ongoing safety and integrity of Temple’s drinking water!



**IMPORTANT PHONE NUMBERS**

Public Works Administration	(254) 298-5621	Temple Police Dept. (Non-Emergency)	(254) 298-5500
Water Treatment Plant	(254) 298-5940	Temple Public Library	(254) 298-5556
Water Dist./Wastewater Collection	(254) 298-5611	Visitors Center	(254) 298-5900
Utility Business Office (Water Bill)	(254) 298-5616	Animal Control	(254) 298-5732
Solid Waste & Recycling Services	(254) 298-5725	City Manager’s Office	(254) 298-5600