



2017 Annual Drinking Water Quality Report

A Report on the Quality of Your Drinking Water

January 1, 2017 through December 31, 2017

Continuing our Commitment - The City of Temple Terrace is committed to providing residents with a safe and reliable supply of quality drinking water. The City tests its water using specialized equipment and advanced procedures. This “2017 Drinking Water Quality Report” explains where the water comes from, how it is treated, test results, and other drinking water information. Water from the Floridian aquifer is pumped by 10 ground water wells located throughout the City. The untreated water is transmitted to the water treatment plants to be aerated, lime-softened, filtered, fluoridated, treated for corrosion control, and chlorinated. Again this year, the City of Temple Terrace had no violations in water quality compliance from our regulatory agencies.

IMPORTANT CONTACT INFORMATION FOR QUESTIONS REGARDING YOUR WATER SERVICE

Additional information and notices about the City of Temple Terrace can be viewed on Temple Terrace Television Channels BrightHouse 641 or Verizon 39 or by visiting:

www.templeterrace.com

The public is also invited to attend City Council meetings, which are held the first and third Tuesday of each month.

Tours of the water treatment facilities may be scheduled between 9 a.m. and 2 p.m., Monday through Friday, (excluding holidays) with a minimum 14 day advanced notice.

For questions about this report or your water services, contact

**Public Works Department
(813) 506-6570**

Source Water Assessment - Florida’s Department of Environmental Protection (DEP) has conducted a Source Water Assessment (SWA) for all public water supplies throughout the State. The City’s SWA was originally conducted in 2004 and was updated eleven times through 2017. The SWA identified that the water system wells are potentially at a moderate risk due to the proximity of several petroleum tanks, and some wells are at low risk due to their proximity to a nearby Class 5 injection well. The SWA report is available on-line at the DEP SWAPP website: www.dep.state.fl.us/swapp.

The moderate risk petroleum tanks are double-lined above-ground tanks located near the water treatment facilities. These tanks are inspected and maintained regularly to insure tank integrity. The City’s drinking water monitoring plan tests for chemicals associated with petroleum during the water sample analysis; to date none have been found in the water supply. Continued testing ensures the safety of our water supply.

Important Health Information - In order to ensure tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public and private water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 at 1-800-426-4791.

People who are at Higher Risk - Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer and undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS, or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

State certified water operators perform over 200 tests a day and work in conjunction with regulatory agencies to ensure the quality of drinking water delivered to our customers.

Initial Distribution System Evaluation (IDSE): An important part of the Stage 2 Disinfection By-Products Rule (DBPR). The IDSE is a one-time water systems study conducted to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use the IDSE results, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

City of Temple Terrace – The City is very pleased to provide this year’s Annual Drinking Water Quality Report. The City’s goal is to provide its residents with excellent water quality and service. In 2017, the Public Works Water Division distributed over 1.292 billion gallons of water. Approximately 82% of the 3.2 million gallons of drinking water used daily in the City is produced at the Whiteway Water Treatment Plant, with the remaining 18% being produced at the Sunningdale Water Treatment Plant. The water pressure produced from these plants averages 55 to 65 psi.



The staff strives to maintain and improve the City’s water distribution system. The system consists of more than 120 miles of underground water mains, five storage tanks with a total storage capacity of 2.8 million gallons, and over 10,000 water meters serving more than 32,000 people.

Drinking Water – The sources of drinking water (both tap and bottled) includes rivers, lakes, streams, ponds, reservoirs, springs and wells.

As water travels over land or through the ground it can pick up substances or contaminants such as microbes, inorganic chemicals, and radioactive substances, some of which result from the presence of animal or human activity. The water dissolves naturally-occurring materials and, in some cases, radioactive materials.

1 M.G. Water Storage Tank



More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants that may be present in source water include:

- (A) Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for organic contaminants], though representative, is more than one year old.

CITY OF TEMPLE TERRACE WATER QUALITY TEST RESULTS							
Where results in the Level Detected column for radiological contaminant, inorganic contaminants, synthetic organic contaminant including pesticides and herbicides, and volatile organic contaminant are the highest average of any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.							
Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely source of Contamination
Radiological Contaminants							
Gross Alpha Emitters (pCi/l)	4/17	No	3.7	3.2 – 3.7	0	15	Erosion of natural deposits
Radium 226 + 288 or combined radium (pCi/l)	5/17	No	1.2	0.8 – 1.2	0	5	Erosion of natural deposits
Uranium (ug/l)	5/17	No	8.8	1.9 – 8.8	0	30	Erosion of natural deposits

Inorganic Contaminants							
Fluoride (ppm)	1/17 -12/17	No	0.95	0.70 - 0.95	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.0 ppm
Nitrate (as Nitrogen) (ppm)	1/17	No	1.8	1.4 - 1.8	10	10	Run-off from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Arsenic (ppb)	4/17	No	2.4	0.87 - 2.4	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	4/17	No	.017	.015 - .017	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium (ppb)	4/17	No	0.06	.031 - 0.060	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Lead (point of entry) (ppb)	4/17	No	0.33	ND - 0.33	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Mercury (inorganic) (ppb)	4/17	No	.063	.062 - .063	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills
Nickel (ppb)	4/17	No	2	0.48 - 2	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Antimony (ppb)	4/17	No	0.28	0.11 - 0.28	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Thallium (ppb)	4/17	No	0.2	ND - 0.2	0.5	2	Leaching from ore processing sites; discharge from electronics, glass, and drug factories
Selenium (ppb)	4/17	No	6.5	1.6 - 6.5	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; discharge from mines
Sodium (ppm)	4/17	No	12	11 - 12	N/A	160	Salt water intrusion; leaching from soil

Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters

For the following contaminants monitored under Stage 1 D/DBP regulations, the level detected is the annual average of the quarterly averages: Bromate Chloramines, Chlorine, Haloacetic Acids (five) (HAA5), and/or TTHM. Range of Results: is the range of results lowest to highest at the individual sampling sites.

Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	MCL Violation Y/N	Level** Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely source of Contamination
Chlorine (ppm)	1/17 - 12/17	No	2.21	1.1 - 2.7	MRDLG=4	MRDL = 4.0	Water additive used to control microbes

TTHM & HAA5 Stage 2 Disinfectant/Disinfection By-Product (D/DBP) Parameters

Haloacetic Acids (five) (ppb)	2/17 - 11/17	No	10.51	1.3 - 13.6	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2/17 - 11/17	No	48.82	25.7 - 69.1	N/A	MCL = 80	By-product of drinking water disinfection

Lead and Copper (Tap Water) Contaminant and Unit of Measurement	Dates of Sampling (Mo./Yr.)	AL Violation	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	7/17 - 8/17	No	0.18	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	7/17 - 8/17	No	1.0	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Highest Monthly Percentage/Number	MCLG	MCL	Likely Source of Contamination
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Microbiological Contaminants

Total Coliform Bacteria	1/17 - 12/17	No	2.3%	0	*	Naturally present in the environment
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Contaminant and Unit of Measurement	Date of Sampling	MCL Violation Y/N	Level Detected	Range	MCL	Likely Source of Contamination
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Unregulated Contaminants 3:

Chromium- 6 (ppb)	1/15	No	.4	.21 - .4	N/A	Naturally - occurring element
Chlorate (ppb)	1/15	No	92	81 - 92	N/A	Agricultural defoliant or desiccant
Vanadium (ppb)	1/15	No	15	5.8 - 15	N/A	Naturally - occurring element
Strontium (ppb)	1/15	No	900	690 - 900	N/A	Naturally - occurring element
Molybdenum (ppb)	1/15	No	9.6	6.8 - 9.6	N/A	Naturally - occurring element found in ores

*For systems collecting at least 40 samples per month; presence of coliform bacteria in 5% of monthly samples

AL = Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that 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.

MFL = Million fibers per liter: Measure of the presence of asbestos fibers that are longer than 10 micrometers.

MREM/YR = Millirem per year: Measure of radiation absorbed by the body.

NTU = Nephelometric Turbidity Unit: Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

ppm = Parts per million or Milligrams per liter (mg/l): One part by weight of analyte to 1 million parts by weight of the water sample.

ppb = Parts per billion or Micrograms per liter (µg/l): One part by weight of analyte to 1 billion parts by weight of the water sample.

Ppt = Parts per trillion or Nanograms per liter (nanograms/l): One part by weight of analyte to 1 trillion parts by weight of the water sample.

pCi/L = Picocurie per liter: Measure of the radioactivity in water.

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

Lead = Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.



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 Temple Terrace Public Works Department 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, the potential for lead exposure can be minimized by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in the water, you should 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.