

# Polk City Water Plant

## 2016 Water Quality Report

### Polk City

We are committed to ensuring the quality of your water and want you to be informed about the water services delivered to you. Our goal is to provide dependable supply of healthy drinking water. Therefore we are pleased to provide our Annual Water Report that describes the quality of the water you drink every day. Information about the contaminants found in your water and how this may relate to your health. The presence of a moderate amount of contaminants in drinking water within regulated standards is normal and does not indicate that the water poses a health risk. Should there be any reason for health concerns with your water, we would notify you immediately.

#### Where does your water come from?

Polk City draws water from wells drilled into the Floridian aquifer. The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the grounds, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity.

#### Why must our water have Chlorine?

Drinking water, including bottled water, may reasonably be expected to contain very small amounts of some contaminants. The presence of contaminants does not necessarily mean that water requires disinfection, so chlorine is added and a minimum contact time of fifteen minutes is provided to destroy living organisms before being delivered to you.

#### Have more questions?

If you have any questions about this report or concerns about your water utility, or want to obtain a copy of the report, please contact Kevin Burge at (772) 708-7946. We encourage our valued customers to get information about their water utility.



#### Special Health Concerns

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency (The EPA's) Safety Drinking Water Hot Line at (800) 426-4791 or on-line at their website:

<http://www.epa.gov/safewater>



#### Want to learn more about Florida water?

Please visit the Florida Department of Environmental Protection (DEP) website at: <http://www.myflorida.com> Find an agency, Environmental Protection, Water, and drinking water.

We are proud to report that in 2016 our drinking water met all federal and state water quality standards.

# Possible dangerous contaminants?

## 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 stormwater runoff, industrial or wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **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.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.



## Protecting your water

Florida's Department of Environmental Protection has conducted a Source Water Assessment (SWA), for all public water systems in Florida, to identify and assesses any potential sources of contamination in the vicinity of your water supply. A SWA conducted for this system in 2009 found that the system's wells are at moderate risk for contamination due to the wells being located within an area of known agriculture ground water contamination, designated as a "Delineated Area" within Florida, for petroleum storage tanks and for hazardous waste. SWA report for Polk City is available at the DEP SWAPP website:

[www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp) or they can be obtained from Kevin Burge at (772) 708-7946.



## Vulnerable Populations

Some people may be more vulnerable contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons 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. US EPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available on the web at:

[www.epa.gov/safewater](http://www.epa.gov/safewater) or telephone the Safe Drinking Water Hotline (800) 426-4791 for any drinking water issue.

We are required to monitor the drinking water for specific contaminants on a regular basis. In the year 2016 a nitrate/nitrite sample from a plant was inadvertently missed. It was sampled as soon as the oversight was noticed. The results came back well under acceptable for nitrate and undetected for nitrite. No adverse health are believed to have resulted from the incident. There is nothing you need to do and you may continue to drink the water.

# Attention Landlords/Property Managers!

If you are a landlord or property manager, please provide this water quality report to your residents/tenants.

## What Water Quality Acronyms and Terms To Know

In our line of work, we use a lot of acronyms. Here are some of the most common ones.

**AL (Action Level):** The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a system must follow.

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**MCL (Maximum Containment Level):** The maximum allowed is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG'S as feasible using the best available treatment technology.

**MRDL (Maximum Residual Disinfection 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. MCLG's allow for a margin of safety.

**MCLG (Maximum Contaminant Level Goal):** The goal is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**ND (Non Detects):** Means not detected and indicates that the substance was not found by laboratory analysis.

**PCi/L (Picocuries Per Liter):** A measure of the radioactivity in water.

**PPB (Parts Per Billion):** Means one part by weight of analyte to 1 billion parts by weight of the water sample.

**PPM (Parts Per Million):** Means one part by weight of anaylte to 1 million parts by weight of the water sample.



**Florida ID # 6531424 2016 TEST RESULTS TABLE Polk City**

\*\* Results in the Level Detected column for radiological and Inorganic contaminants are the highest detected level at any sampling point.

**Radioactive Contaminants**

Contaminant and Unit of Measurement	MCL Violation Yes / No	**Level Detected	Range of Results	MCLG	MCL	Monitoring Period Month / Year	Likely Source of Contamination
Alpha emitters	pCi/L No	2.2	1.8 – 2.5	0	15	Jan – Dec 2015	Erosion of natural deposits
Radium 226 + Radium 228 [combined Radium]	pCi/L No	0.75	0.7 – 0.8	0	5	Jan – Dec 2015	Erosion of natural deposits
Uranium	Pg/L No	1.95	1.8 – 2.1	0	30	Jan – Dec 2015	Erosion of natural deposits

**Inorganic Contaminants**

Arsenic	ppb	No	3.05	3.0 – 3.1	n/a	10	Jan – Dec 2015	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Fluoride	ppb	No	0.275	ND - 0.55	N/A	2	Jan – Dec 2015	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.
Antimony	ppb	No	0.44	0.35 – 0.52	6	6	Jan – Dec 2015	Natural weathering of rock, industrial production, municipal waste disposal, and manufacturing processes.
Barium	ppm	No	0.0053	0.0050 – 0.0055	2	2	Jan – Dec 2015	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
*Nitrate	ppm	No	0.47	0.47	10	10	Jan – Dec 2016	Run off from fertilizer, leaking septic tanks, sewage, and erosion from natural deposits.
Nickel	ppb	No	0.8	ND – 1.5	N/A	100	Jan – Dec 2015	Pollution from mining and refining operations. Natural occurrence in soil.
Sodium	ppm	No	7.6	6.5 – 8.7	N/A	160	Jan – Dec 2015	Salt water intrusion, leaching from soil.

\*During the 2016 sampling year nitrate samples from both WTP were required. A sample from Commonwealth was inadvertently overlooked. A sample was immediately taking. The results came back as 0.26 ppm, well within acceptable limits.

**Synthetic Organic Contaminants including Pesticides and Herbicides**

Glyphosphate	ppb	No	27	ND - 27	700	700	Jan – Dec 2015	Runoff from herbicide use
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**Chlorine Residual and Stage 2 Disinfectant / Disinfection By-Product (D / DBP) Parameters**

Chlorine – Level Detected is the highest 2014 monthly average; Range of Results is the range of (lowest to highest) monthly residual disinfectant.  
 HAA5 / TTHMs – Level Detected is the highest detected level at any sampling point. Range of Results is the range of results from lowest to highest.

Contaminant and Unit of Measurement	Dates of sampling (mo. / yr.)	MCL Violation Yes / No	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine	Jan – Dec 2016	No	1.0	0.6 – 1.8	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Total Trihalomethanes [TTHM]	July – Sept 2016	No	5.8	5.8	n/a	MCL = 80	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	July – Sept 2016	No	ND	ND	n/a	MCL = 60	By-product of drinking water disinfection

**Lead and Copper (Tap Water)**

Contaminant and Unit of Measurement	Action Level Violation Yes / No	90 <sup>th</sup> Percentile Result	Number of Sampling Sites Exceeding the Action Level	MCGL	Action Level	Monitoring Period Month / Year	Likely Source of Contamination
Copper (tap water)	No	0.084	0	1.3	AL= 1.3	June – Sept 2015	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water)	No	0.0014	0	15	AL = 15	June – Sept 2015	Corrosion of household plumbing systems; public water systems, and erosion of natural deposits.

**The Safe Drinking Water Act (SDWA) requires utilities Issue to the following Information, even if you have no Lead in your water:**

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. Polk City is responsible for providing high quality drinking water, but cannot control the variety of material 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>.

**Why is Drinking Water Regulated?**

In order to ensure that tap water is safe to drink, the DEP and EPA prescribe regulations and standards for limiting the amount of certain contaminants in water provided by public water systems. To protect consumers, Florida's DEP also requires public water systems comply with regulations governing the construction, operation and health issues relative to your water supply. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect of some contaminants. Don't forget, the presence of contaminants does not necessarily indicate that the water poses a health risk. Bottled water and water vending machines are regulated under the Florida Department of Agriculture and Consumer Services, Division of Food Safety and the federal Food and Drug Administration regulations that establish limits for contaminants in bottled water which must provide the same protection for public health. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Don't forget, the presence of contaminants does not necessarily indicate that the water poses a health risk,