

# City of Davenport

## 2018 Annual Drinking Water Quality Report

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and service we deliver to you everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of our water.

Our water source is ground water from three wells. Our wells draw water from the Floridan Aquifer. The water is aerated to release volatiles, disinfected with chlorine and delivered to your home. City of Davenport routinely monitors for contaminants in your drinking water according to Federal and State laws, rules and regulations.

Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2018. Also included are test results in earlier years for contaminants sampled less often than annually. For contaminants not required to be tested for 2018, test results are for the most recent testing done in accordance with regulations authorized by the State and approved by the Environmental Protection Agency (EPA).

As water travels over land or underground it can pick up substances and or contaminants such as microbes, non-organic, organic chemicals and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants.

It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

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 other human activity.

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. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, 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 results 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 byproducts of oil and gas production and mining activities.

In order to ensure that 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 which must provide the same protection for public health.

Drinking Water, including bottle water, may reasonably be 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.

**Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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. 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 (800-426-4791).**

## Florida Source Water Assessments

"In 2018 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are five potential source of contamination identified for this system from domestic wastewater, petroleum storage tanks and agricultural chemical use with a low susceptibility level and delineated areas with a moderate level of risk. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp)."

Potential sources of contamination are those facilities, sites and activities that may affect the underlying ground water aquifers or nearby surface waters used for public drinking water supply. It is crucial to understand that these potential sources are just that – potential. Many are regulated by DEP or other agencies and operated under stringent construction and maintenance requirements designed to protect human health and the environment.

## 2018 Analytical Results

Below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

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.

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

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

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.

'N/A' means does not apply.

"ND" means not detected and indicates that the substance was not found by laboratory analysis.

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

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

Picocurie per liter (pCi/L) - measure of the radioactivity in water.

### NON-SECONDARY CONTAMINANTS TABLE

Microbiological Contaminants						
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage/Number	MCLG	MCL	Likely Source of Contamination
1. Total Coliform Bacteria (positive samples)	1/2018 – 12/2018	N	0	0	.For systems collecting fewer than 40 samples per month: presence of coliform bacteria in >1 sample collected during a month.	Naturally present in the environment

**Total Coliform Bacteria:** The Highest Monthly Number is the highest monthly number of positive samples for systems collecting fewer than 40 samples per month.

An acute violation of the Total Coliform Rule (TCR) exists when:

- any system collects a fecal-positive or *E. Coli*-positive sample that is followed by any positive repeat sample; **or**
- if any total coliform-positive sample is followed by a repeat sample that tests positive for either fecal coliform or *E. Coli*.

A non-acute violation of the TCR exists when:

- a system which collects fewer than 40 samples per month has more than 1 sample test positive for total coliform

*Possible Scenarios:*

- A fecal-positive or *E. Coli*-positive followed by proper repeat sampling absent of any contamination does not generate a violation as long as the TCR has not been violated.

\*\* Results in the Level Detected column for radioactive contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest average at 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
<b>Radiological Contaminants</b>							
Alpha emitters (pCi/L)	04/17	N	1.8	ND – 1.8	0	15	Erosion of natural deposits
Radium 226 + Radium 228 or Combined Radium (pCi/L)	04/17	N	1.2	0.6 – 1.2	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium (ppm)	04/17	N	0.0147	0.0102 – 0.0147	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	04/17	N	1.6	ND – 1.6	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nitrate (as Nitrogen) (ppm)	01/18 – 12/18	N	6.83	0.883 - 6.83	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	04/17	N	4.5	3.10-4.50	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	04/17	N	8.39	6.81-8.39	N/A	160	Salt water intrusion, leaching from soil
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>							
Di(2-ethylhexyl) phthalate (ppb)	01/18 – 12/18	N	ND	ND	0	6	Discharge from rubber and chemical factories

### Stage 2 Disinfectant/Disinfection By-Product (D/DBP) Contaminants

For chlorine, the level detected is the the highest running annual average (LRAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the highest LRAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations, including Initial Distribution System Evaluation (IDSE) results as well as Stage 2 compliance results.

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)	01/18-12/18	N	1.33	0.26-3.91	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	07/18	N	12.3	10.2 – 12.3	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	07/18	N	11.7	8.59 – 11.7	N/A	MCL = 80	By-product of drinking water disinfection

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
<b>Lead and Copper (Tap Water)</b>							
Copper (tap water) (ppm)	07/17	N	0.501	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	07/17	N	4.1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

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. City of Davenport 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, 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>.

City of Davenport would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, or want to obtain a copy of this report please call Pat Gill at (863) 419-3300.