

2020 Water Quality Report of the City of Perry

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. 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 your water. Our water source is supplied by 3 wells; these wells draw water from the Floridan Aquifer. Our water distribution system consists of 3 water treatment facilities:

- Mason Kelley Water Treatment Plant – 713 N. Faulkner St.
- Perry Water Works Treatment Plant - 404 W. Leon St.
- Well #3 Pumping Station – Leon St. & Faulkner St.

We are also supported by a 200,000 gallon elevated storage tank located on Baker St., a 423,000 gallon ground storage tank located on Industrial Park Drive near the Perry Airport and two disinfectant Booster stations.

At these treatment facilities, source water is chlorinated for disinfection and fluoridated for dental health purposes. Source water at Mason Kelley WTP and Perry Water Works is also filtered for Iron removal. Filter media consists of anthracite over sand. A polyphosphate is added at each facility to inhibit Iron, Manganese, and corrosion.

In 2020, the Department of Environmental Protection conducted a Source Water Assessment of the Perry Water System. This assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There is 1 potential source of contamination identified for this system with a low susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp

This report shows our water quality results and what they mean.

If you have any questions about this report or concerning your water utility, please contact **Jerald Lee, City of Perry, 224 S. Jefferson St., Perry, FL 32347 at (850) 584-7940 ext 3**. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on **2nd and 4th Tuesdays of each month at 5:30 p.m. in the City Council Room**.

The City of Perry 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 1st to December 31st, 2020. Data obtained before January 1, 2020, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you will find terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Action Level (AL):

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Locational Running Annual Average (LRAA):

the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

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 Contaminant Level Goal (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.

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 control of microbial contaminants.

Maximum residual disinfectant level goal (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.

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.

Results Tables

Inorganic Contaminants							
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
Arsenic (ppb)	12 / 2020	N	0.0012	ND – 0.0012	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	12 / 2020	N	0.0125	0.0066 – 0.0125	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	12 / 2020	N	61.2	ND – 61.2	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	12 / 2020	N	0.446	ND – 0.446	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7 ppm
Lead (point of entry) (ppb)	12 / 2020	N	1.3	ND – 1.3	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nitrate (as Nitrogen) (ppm)	02 / 2020, 12 / 2020	N	0.303	ND - 0.303	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	12 / 2020	N	4.7	3.41 – 4.7	N/A	160	Salt water intrusion, leaching from soil

Stage 1 Disinfectants

Disinfectant and Unit of Measurement	Dates of sampling (mo./yr.)	MRDL Violation Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	01 / 2020 – 12 / 2020	N	1.089	0.873 – 1.34	4	4.0	Water additive used to control microbes

Stage 2 Disinfection By-Products

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
Total Trihalomethanes [TTHM] (ppb)	01 / 2020 – 12 / 2020	N	76.32 (highest LRAA, at Site 1)	55.6 – 66.9	NA	80	By-product of drinking water disinfection
Haloacetic Acids (five) [HAA5] (ppb)	01 / 2020 – 12 / 2020	Y	66.93 (highest LRAA, at Site 2)	34.1 – 130.0	NA	60	By-product of drinking water disinfection

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. Our water system was in violation of federal and state water quality standards for Haloacetic acids (five)(HAA5) for all four quarters of 2020. The levels of these contaminants are shown in the Test Results Table. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Our system has been working to correct this violation by installing permitted improvements, including filter replacements, to the drinking water treatment process at our facility.

We failed to collect the proper number of samples for Synthetic Organic Contaminants (SOCs). Two sets of samples were required in the time period of January – December 2020 and only one set of samples were collected. Because we didn't collect the proper number of samples we cannot be sure if the contaminants were present in your drinking water at that time. Sampling for SOCs resumed in March of 2021.

We failed to complete required sampling for Disinfection Byproducts on time in the third quarter of 2020 and therefore were in violation of monitoring and reporting requirements. Because we did not take the samples in the required time period, we did not know whether the contaminants were present in your drinking water at that time, and we are unable to tell you whether your health was at risk during that time. The monitoring period was August 8-14, 2020. Sampling resumed on August 27, 2020.

We failed to collect samples properly for Asbestos required in the time period of January – December 2020. Although the sample was collected on time, it was sampled from the wrong location. Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps. Our system corrected this violation by taking the sample from the correct location on April 1, 2021. Contaminants were not detected in this sample.

Lead and Copper (Tap Water)							
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
Copper (tap water) (ppm)	09 / 2020	N	0.248	0 of 20	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	09 / 2020	N	2.2	0 of 20	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. The City of Perry 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>.

Unregulated Contaminants			
Contaminant and Unit of Measurement	Dates of sampling (yr.)	Average Level Detected	Range of Results
Bromide (ppb)	2018	98	53 - 280
Haloacetic Acids (HAA5) (ppb)	2018	55.84	35.02 – 73.00
Haloacetic Acids (HAA6Br) (ppb)	2018	6.09	2.85 – 8.97
Haloacetic Acids (HAA9) (ppb)	2018	61.94	37.88 - 81.16
Manganese (ppb)	2018	11.88	7.30 – 22.17
Total Organic Carbon (TOC) (ppb)	2018	2,492	1,388 – 4,200

The City of Perry has been monitoring for unregulated contaminants (UC) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UC and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UC. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule (UCMR), please call the Safe Drinking Water Hotline at (800) 426-4791.

SECONDARY CONTAMINANTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Iron (ppm)	12 / 2020	Y	0.399	0.266 – 0.399	NA	0.3	Natural occurrence from soil leaching

As you can see by the table, our system exceeded the MCL for Iron. However, iron is a secondary contaminate and is not associated with adverse health effects at the level shown. We are adding a polyphosphate for treatment of Iron.

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 human activity.

Contaminants that may be present in source water include:

<i>(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</i>
<i>(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</i>
<i>(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.</i>
<i>(D) 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 stormwater runoff, and septic systems.</i>
<i>(E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.</i>

To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The U.S. 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 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).

We at the **City of Perry** would like for 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, please feel free to call **Jerald Lee** at **(850) 584-7940 ext 3**.