

2021 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 2 chlorine 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 2021, 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, 2021. Data obtained before January 1, 2021, 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 or AL:

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

Locational Running Annual Average or LRAA:

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

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.

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.

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.

Radioactive 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
Alpha emitters (pCi/L)	06/2017	N	2.2	N/A	0	15	Erosion of natural deposits
Radium 226 (pCi/L)	06/2017	N	0.7	N/A	0	5	Erosion of natural deposits

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	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	12 / 2020	N	0.0125	0.0066 – 0.0125	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	12 / 2020	N	0.0612	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	12 / 2020	N	0.446	N/A	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Lead (point of entry) (ppb)	12/2020	N	0.0013	N/A	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nickel (ppb)	12/2020	N	0.0018	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	2 / 2020 12 / 2020	N	0.303	0.0466 – 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 and Disinfection By-Products							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	01 / 2021 – 12 / 2021	N	1.15	0.63– 1.36	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

Test Results Tables

TTHM Monitoring Results (ppb)	1 st quarter 2021	2 nd quarter 2021	3 rd quarter 2021	4 th quarter 2021
Site 1 Quarterly Results	97.70	57.20	61.90	67.80
Site 1 – LRAA*	72.43	70.53	70.93	71.15
Site 2 Quarterly Results	78.40	78.90	80.20	41.20
Site 2 – LRAA*	67.28	73.13	76.03	69.68

One sample during 2021 (700 Charles Hendry Rd) had a Total Trihalomethanes result of 97.70 parts per billion (ppb), which exceeds the Maximum Contaminant Level (MCL) of 80 ppb. However, the system did not incur an MCL violation, because all annual average results at all sites were at or below the MCL.

HAA5 Monitoring Results (ppb)	1 st quarter 2021	2 nd quarter 2021	3 rd quarter 2021	4 th quarter 2021
Site 1 Quarterly Results	56.40	97.30	42.70	30.60
Site 1 – LRAA*	51.15	63.93	57.63	56.75
Site 2 Quarterly Results	70.00	102.00	80.30	18.70
Site 2 – LRAA*	70.63	86.05	73.63	67.75

*Reported LRAA for quarters 1-3 are based on results from previous quarters not reported on this table.

Stage 2 Disinfection By-Products

Disinfectant or 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) Site 1	01 / 2021 – 12 / 2021	N	97.70 (highest LRAA)	57.20-97.70	NA	MCL = 80	By-product of drinking water disinfection
Haloacetic Acids (five) (HAA5) (ppb) Site 1	01 / 2021 – 12 / 2021	Y	63.93 (highest LRAA)	30.60-97.30	NA	MCL = 60	By-product of drinking water disinfection
Haloacetic Acids (five) (HAA5) (ppb) Site 2	01 / 2021 – 12 / 2021	Y	86.05 (highest LRAA)	18.70-102.00	NA	MCL = 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) in 2021. 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 to the drinking water treatment process at our facility.

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	0.0022	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>.

Secondary Contaminants							
Disinfectant or 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	0.2660-0.399	N/A	0.3	Natural occurrence from soil leaching

As shown in the table above, we exceeded the maximum contaminant level for Iron which is a secondary contaminant. When above the MCL secondary contaminants are considered to be an aesthetic violation, and are not considered by the EPA to have major health effects.

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:

(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 by-products 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.

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. 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 ensuring 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**.