

2020 Annual Drinking Water Quality Report Port Buena Vista

Water Source, Source Water Plans, and Treatment

We're very pleased to provide you with this year's Annual Drinking Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is ground water from wells. The wells draw from the Floridan Aquifer.

In 2020, 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 is one 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 or they can be obtained from Sam Willis.

Major Treatment Processes

Ground water is drawn from two water wells simultaneously. The water is aerated to remove hydrogen sulfide, then filtered to remove iron. The potable water is then disinfected and stored on-site and pumped to our customers.

Contact Information

If you have any questions about this report or concerning your water utility, please contact Sam Willis, Utility Supervisor at 386-326-7289. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of the Board of County Commissioners' regularly scheduled meetings. They are held on the second and fourth Tuesdays, 9:00 A.M. at the Putnam County Government Complex, 2500 Crill Ave., Palatka, Florida, 32177. You can also obtain additional information from EPA at their Safe Drinking Water Hotline (800-426-4791).

Period Covered by Report

Port Buena Vista 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 to December 31, 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.

Terms and Abbreviations

In the table 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.

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 billion (ppb) or Micrograms per liter ($\mu\text{g/l}$): one part by weight of analyte to 1 billion parts by weight of the water sample.

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.

Required Lead Language

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.

Vulnerable Population Language

Some people may be more vulnerable to 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. 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).

Water Quality Test Results

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
Radioactive Contaminants							
Radium 226 + 228 or combined radium (pCi/L)	9/2016	N	1.5	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
Barium (ppm)	12/2018	N	0.025	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Sodium (ppm)	12/2018	N	54	N/A	N/A	160	Salt water intrusion, leaching from soil

We failed to complete required sampling for Nitrate/Nitrites during the year of 2020, and therefore were in violation of monitoring and reporting requirements. Because we did not take the required samples, we did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time. *Infants below the age of six months who drink water containing nitrate or nitrite in excess of the MCL could become seriously ill and, if untreated, may die.* Symptoms include shortness of breath and blue baby syndrome. Sampling was conducted March 30, 2021 and both Nitrate and Nitrite was below the detection limit.

Synthetic Organic Contaminants including Pesticides and Herbicides

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
Dalapon (ppb)	3/2020, 6/2020	N	3.2	2.0 – 3.2	200	200	Runoff from herbicide used on rights of way

Stage I Disinfectants and Stage II Disinfection Byproducts

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)	1/2020-12/2020	N	0.52	0.45 – 0.60	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	3/2020, 6/2020, 9/2020, 12/2020	Yes	66.69	ND – 79.23	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	3/2020, 6/2020, 9/2020, 12/2020	Yes	173.45	1.36 – 196.53	N/A	80	By-product of drinking water disinfection

Our office failed to submit the second, third, and fourth quarter 2020 Disinfection Byproducts on time. When results were submitted to the Department, the running annual averages for Haloacetic Acids (HAA5) exceeded the MCL for the second and third quarter monitoring periods, and the Total Trihalomethanes for the first through fourth quarters exceeded the MCL for Total Trihalomethanes (TTHM), and as a result, a violation was generated. The Level Detected reported in the table above is the highest Locational Running Annual Average observed. In addition, the Operational Evaluation Level Assessment for the TTHM/HAA5 exceedances has not been submitted. Port Buena Vista is conducting quarterly monitoring and working with the Department of Environmental Protection to return to compliance. *Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.*

Violations were generated for late submittal of the quarterly Disinfection Byproducts monitoring, first quarter 2020 Annual Dalapon, and the August and September 2020 bacteriological monitoring reports to the Department of Environmental Protection Office. These violations have no impact on the quality of the water our customers received, and it posed no risk to public health. We are establishing a report tracking file to ensure that all reporting requirements are met in the future.

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	06/2020	N	0.41	1	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	06/2020	Y	28	2	0	15	Corrosion of household plumbing systems; erosion of natural deposits

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. This includes monitoring for lead at customer's taps. In August 2020, lead levels at 2 of the 10 taps sampled exceeded the action level (AL) of 15 ppb. The 90th percentile result and the number of sampling sites exceeding the AL is shown in the test results table. The two sampling locations that were above the action level had to be collected from exterior taps instead of the recommended interior kitchen or bathroom sink taps and may have contributed to the higher results. We conducted additional sampling after discovering the results to confirm if the results were correct, or if it was due to due to sampling procedures. These samples were collected for informational purposes, and not able to be used to determine compliance. Since the 90th percentile result exceeded the AL, additional steps to evaluate the water system were triggered, and is not a violation.

However, we failed to complete required sampling for tap water lead and copper on time and therefore were in violation of monitoring and reporting requirements. Because we did not take the required number of samples, we did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time. The monitoring period was 7/1/2020 through 12/31/2020. Ten samples were required for each contaminant, and none were taken. *Infants and children who drink water containing lead in excess of the MCL could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.*

Secondary Contaminants							
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)	12/2018	Y	1.2	0.94 - 1.2		0.3	Natural occurrence from soil leaching
Total Dissolved Solids (ppm)	12/2018	Y	610	N/A		500	Natural occurrence from soil leaching

Florida Source water is naturally high in dissolved minerals and Iron and Total Dissolved Solids exceeded the MCL in some of our sampling. The concentration found in our water only affects the aesthetic quality (look, smell, taste) and is not associated with any adverse health effects.

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. Port Buena Vista 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>.

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, the 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.

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.

Closing Language

We at Port Buena Vista 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, please feel free to call any of the numbers listed.