

CITY OF BRADENTON 2019 WATER QUALITY REPORT

The City of Bradenton makes a commitment daily to provide the highest quality drinking water to the residents of the City of Bradenton. This report reflects on that commitment and represents a summary of the drinking water quality during 2019.

PROTECTING BRADENTON'S WATER SOURCES

Drinking water for the customers of Bradenton's Utilities Department is a blend of purified surface water and ASR wells (Aquifer Storage Recovery). In 2019 the Florida Department of Environmental Protection (FLDEP) 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 or surface water intakes. There are four potential sources of contamination identified for the City of Bradenton Water Purification Plant with susceptibility levels of low and high. The assessment results are available on the FDEP Source Water Assessment and Protection Program website www.dep.state.fl.us/swapp or they can be obtained from the City of Bradenton Purification Plant at (941) 727-6366.

HEALTH AND SAFETY STANDARDS

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.

To ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amounts 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.

HOW YOUR WATER IS PURIFIED

The City of Bradenton Purification Plant is located at 5600 Natalie Way, Bradenton, FL 34203. The surface water is purified by carbon adsorption, coagulation, sedimentation and filtration. These processes remove odor, color, and undesirable elements such as suspended matter and microbiological organisms. It is also treated with a corrosion inhibitor, prolonging your home plumbing and fixtures. Natural fluoride levels are slightly increased to optimal levels as a public health measure to help develop decay resistant teeth and strong bones.

The purification plant is staffed with dedicated, professionally trained, State certified operational and maintenance personnel. This staff operates and maintains the advanced water purification facility as well as monitoring and researches water quality issues.

2019 WATER QUALITY SUMMARY

MICROBIOLOGICAL

Contaminant and Unit of Measurement	>Dates of Sampling	MCL Violation Y/N	Highest Monthly Percentage	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	01/19-12/19	No	2.95%	0	>3% ^A	Naturally present in the environment

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Highest Single Measurement	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Filter turbidity (NTU)	01/19–12/19	No	0.128	100% ^B	N/A	TT ^B	Soil runoff

INORGANIC

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Max. Level Detected	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	01/19–12/19	No	0.023	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium (ppb)	01/19-12/19	No	1.0	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	01/19-12/19	No	0.20	100	100	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis
Fluoride (ppm)	01/19-12/19	No	0.525	4	4	Water additive which promotes strong teeth
Nickel (ppb)	01/19–12/19	No	0.20	100	100	Pollution from mining and refining operations. Natural occurrence in soil.
Sodium (ppm)	01/19–12/19	No	63.3	N/A	160	Salt water intrusion, leaching from soil

STAGE 2 DISINFECTANT AND DISINFECTION BY-PRODUCTS (D/DBP) PARAMETERS

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling	MCL or TT Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	01/19–12/19	No	3.71 ^c	0.60 – 6.0 ^d	MRDLG = 4	MRDL = 4 ^e	Water additive used to control microbes
Haloacetic acids (ppb)	01/19–12/19	No	18.7 ^f	5.76 – 23.5 ^d	N/A	MCL = 60 ^g	By-product of drinking water disinfection
Total Trihalomethanes (ppb)	01/19–12/19	No	13.0 ^f	6.23 – 14.8 ^d	N/A	MCL = 80 ^g	By-product of drinking water disinfection
Total organic carbon (ratio) ^h	01/19–12/19	No	2.06 ⁱ	1.90 – 2.30	N/A	TT	Naturally present in the environment

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Dates of Sampling	AL Violation Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Lead (ppb)	2019 ^J	No	0.002 I	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	2019 ^J	No	0.15 I	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

UNREGULATED CONTAMINANTS

Contaminant and Unit of Measurement	Dates of Sampling	Max. Level Detected	Range of Results	Likely Source of Contamination
Manganese (ppm)	01/19–12/19	2.25 ^K	1.4 – 3.1 ^E	Natural Occurrence from soil leaching
Bromide (ppb)	01/19-12/19	161 ^K	138 – 184 ^E	By-product of drinking water disinfection
HAA5 (ppb)	01/19-12/19	7.54 ^K	1.66 – 14.1 ^E	By-product of drinking water disinfection

Contaminant and Unit of Measurement	Dates of Sampling	Max. Level Detected	Range of Results	Likely Source of Contamination
HAABr (ppb)	01/19-12/19	5.74 ^K	2.16 – 10.9 ^E	By-product of drinking water disinfection
HAA9 (ppb)	01/19-12/19	11.5 ^K	2.40 – 21.1 ^E	By-product of drinking water disinfection
TOC (ppm)	01/19-12/19	12.5 ^K	11.5 – 13.4 ^E	Naturally present in the environment

TABLE KEY & DEFINITIONS

AL: Action Level

MCL: Maximum Contaminant Level

MCLG: Maximum Contaminant Level Goal

N/A: not applicable

ND: not detected

NTU: Nephelometric Turbidity Units

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: parts per billion, or micrograms per liter (ug/L)

ppm: parts per million, or milligrams per liter (mg/L)

TT: Treatment Technique

I: Reported value is between the laboratory MDL and the PQL.

FOOTNOTES

[A] total coliform detections must not exceed 5% of all monthly samples.

[B] filter turbidity must not exceed 0.3 NTU in 95% of daily samples in any month.

[C] the value is the highest running annual average, computed quarterly.

[D] these values represent values at individual sample sites.

[E] a public water system (PWS) is in compliance with the MRDL when the running annual average of monthly averages of monthly samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL.

[F] the value is the highest locational running annual average, computed quarterly.

[G] a PWS is in compliance with the MCL when the locational running annual average, computed quarterly, is less than or equal to the MCL.

[H] these values represent the % total organic carbon removal achieved at the treatment plant divided by the % removal required.

[I] this value is the lowest running annual average, computed quarterly, of monthly removal ratio. This value must be above 1.0 for compliance.

[J] the State allows us to monitor for some contaminants less than once per year because data, though representative, are more than one year old.

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

Filter Turbidity (NTU): Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfectants.

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.

Total trihalomethanes: Disinfection by-products expressed as the sum of chloroform, dibromochloromethane, bromodichloromethane and tribromomethane.

Not Detected or ND: Indicates the substance was not found by laboratory analysis.

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

LEAD

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 Manatee County Water Purification Plant 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

IMMUNO-COMPROMISED INDIVIDUALS

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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791). These precautions apply to publicly supplied water, bottled water, private well water or water from home treatment devices.

FIND OUT THE FACTS

Concerns about drinking water quality have caused many residents to use bottled water or to install home treatment devices. Be sure to learn about the quality of the alternate water or the expected water quality from home treatment devices. If you need help in understanding water quality issues or have questions about this report or have a water quality concern, please give us a call at 941-727-6366.

Additional information can be found on the [City of Bradenton.com](http://CityofBradenton.com) Just click on the "Water Quality Report" link.

ATTENTION PROPERTY MANAGERS

If you are a property owner or manager, please provide this water quality report to your tenants. This report may be photocopied or posted in a prominent location at your facility. More copies are available by calling 941-727-6366.

