Broad Creek Public Service District

PO Box 5878, Hilton Head Island, SC 29938

843-785-7582 www.bcpsd.com July 2023

(System #0720009)

Annual Drinking Water Quality Report

Broad Creek PSD (BCPSD) is pleased to present to you this year's ***Annual Water Quality Report***. This report is designed to inform you about the quality of water and the 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 wells draw from the Floridan Aquifer and are supplemented with water purchased from Hilton Head Public Service District, which is blended water. This blended water is ground water from the Upper Floridan Aquifer, from an advanced reverse osmosis plant and from Beaufort-Jasper Water Sewer Authority, which is treated surface water from the Savannah River.

The source water protection plan for our system is available for your review through the South Carolina Department of Health and Environmental Control website at www.scdhec.gov/water/html/srcewtr.html.

We are pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Linda Dean at (843) 785-7582 ext. 208. We want 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 usually held on the second Friday of each month at 9:00 A.M. in the conference room of BCPSD.

BCPSD routinely monitors for contaminants in your drinking water according to Federal and State laws. These tables show the results of our monitoring for the period of January 1st to December 31st 2022, or other dates shown in the tables. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and 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's important to remember that the presence of these contaminants does not necessarily pose a health risk.

These Test Result tables list the contaminants which were detected and the level at which the detection occurred. For brevity, we have only listed the contaminants which were detected within the past year's tests or the latest test for the contaminant with the exception of microbiological contaminants, which were not detected. In these tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) *or* ***Milligrams per liter (mg/l)*** - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) *or* ***Micrograms per liter (ug/l)*** - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measurement of radioactivity in water.

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

Maximum Contaminant Level (MCL)- the "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - The highest level of distinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The "Goal" (MRDLG) is the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Health Information

Inorganic Contaminants:

(1) ***Copper***. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal physician.

(2) ***Lead***. Infants and children who drink water containing lead in excess of the action level 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.

(3) ***Fluoride***. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may develop mottled teeth.

(4) ***Chloramines.*** Some people who use drinking water containing chloramines in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines in excess of the MRDL could experience stomach discomfort or anemia.

Volatile Organic Contaminants:

(5) ***Total Trihalomethane (TTHM) and*** *(6)* ***Haloacetic Acid(HAA5).*** Some people who drink water containing TTHM or HAA5 in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of developing cancer.

(7) ***Beta/photon emitters.*** Certain minerals are radioactive and may emit a form of radiation known as protons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years have an increased risk of developing cancer.

(8) ***Gross Alpha excluding Radon and Uranium.*** Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years have an increased risk of developing cancer

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 Drinking Water Hotline at** (800) 426-4791.

MCL's are set at very stringent levels. To better understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of the described health effect.

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. BCPSD 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 drinking water, you may wish to have your water tested. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure call the Safe Drinking Water Hotline at (800) 426-4791 or at http://www.epa.gov/safewater/lead.

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 providers. EPA/CDC offer guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

TEST RESULTS FLORIDAN AQUIFER (0720009)

Contamination	Violation Y/N	Level Detection	Unit of Measurement	MCLG	MCL	Comments
Inorganic Contaminants						
1. Copper (2022)	NO	0.063	ppm	1.3	AL = 1.3	Value in Level Detection column is the 90th percentile value. No sites had copper levels detected above the Action Level value. Corrosion of household plumbing systems, erosion of natural deposits.
2. Lead (2022)	NO	2.300	ppb	0	AL=15.0	Value in Level Detection column is the 90th percentile value. No sites had a lead level detected above the Action Level value. Corrosion of household plumbing systems, erosion of natural deposits.
3. Fluoride (2021)	NO	0.70 Range 0.69 - 0.70	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from the fertilizer and aluminum factories.
4. Chloramines (2022)	NO	2.0 Range 2.00 - 2.00	ppm	MRDLG 4	MRDL 4	Water additive used to control microbes.
Sodium (2021)	NO	96 (average) 84-110	ppm	Not Applicable		Erosion of natural deposits.
Volatile Organic Contaminants (2022)						
5. TTHM (Total Trihalomethane)	NO	Location Running Annual Average 17.00 Range 1.40 - 26.87	ppb	No goal for the total	80	By-product of drinking water disinfection.
6. HAA5 (Haloacetic acid)	NO	Location Running Annual Average 8.00 Range 1.92 - 19.25	ppb	No goal for the total	60	By-product of drinking water chlorination.
Radioactive Contaminants (2021)						
7. Beta/photon emitters	NO	Highest Level 6.04 Range 4.03-6.04	pCi/L	0	50*	Decay of natural and man-made deposits.
8. Gross Alpha excluding Radon and Uranium	NO	Highest Level 1.16 Range 0-1.16	pCi/L	0	15	Erosion of natural deposits.

*The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles. Because the beta particle results were below 50 pCi/L, no testing for individual beta particle constituents was required.

Hilton Head Public Service District (0720006)

Contamination	Violation Y/N	Level Detection	Unit of Measurement	MCLG	MCL	Comments
3. Fluoride (2021)	NO	0.42 Range 0.11-0.42	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Sodium (2021)	NO	48 (average) 23-97	ppm	Not Applicable		Erosion of natural deposits.
Thallium (2021)	NO	0.50 Range 0-0.50	ppb	2	2	Discharge from electronics, glass and leaching from ore-processing sites, drug factories.

As you can see by the tables, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water **IS SAFE** at these levels.