

Hilton Head Public Service District Water Quality Test Results

for the period of January 1 to December 31, 2012

This report is intended to provide you with important information about your drinking water and the efforts made by the PSD to provide safe drinking water.

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Hilton Head PSD is governed by an elected Board of Commissioners. The Commission typically meets on the fourth Tuesday of each month in the PSD Community Room at our Water Resource Center at 21 Oak Park Drive off Mathews Drive on Hilton Head Island.

If you have any questions about this report or the water provided to you by Hilton Head PSD, please contact PSD Community Relations Manager Pete Nardi at (843) 681-0525 or info@hhpsd.com.

Mandatory Statements

The following mandatory statements are required by the U.S. Environmental Protection Agency and the S.C. Department of Health and Environmental Control to appear in this Annual Water Quality Report, regardless of the results of water quality monitoring. These statements must appear in all Annual Water Quality Reports for all publicly regulated drinking water providers in the United States.

Source of Drinking Water

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:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

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.

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).

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. We 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.

Helping you better understand the technical terms

The following **definitions** will help you understand the data and information presented in the Water Quality Test Result tables.

- **90th percentile**: Of all the samples analyzed, 90 percent were at or below this detection level.
- Action Level or AL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Action Level Goal or ALG: The level of a contaminant in drinking water below which there is no known or expected risk to human health. ALGs allow for a margin of safety.
- 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 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.
- Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- 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.
- **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.
- MG/L: milligrams per liter. One mg/l is equal to one part per million.
- **na**: not applicable.
- ND: non-detect.
- **NTU**: nephelometric turbidity units. NTU is a measure of the clarity of treated surface water used to determine the effectiveness of filtration systems.
- **pCi/L**: picocuries per liter. The measure of radioactivity in water. It is equivalent to the quantity of radioactive material producing 2.22 nuclear transformations per minute.
- **ppm**: milligrams per liter or parts per million or one ounce in 7,350 gallons of water.
- **ppb**: micrograms per liter or parts per billion or one ounce in 7,350,000 gallons of water.
- **RAA**: running annual average.
- **TT**: treatment technique.

2012 Regulated Contaminants Detected Hilton Head PSD (#0720006)

Lead and Copper

Lead	Date	MCLG	Action	90 th	# Sites	Units	Violation	Likely Source
and	Sampled		Level	Percentile	Over			of
Copper			(AL)		Action			Contamination
					Level			
					(AL)			
Copper	2012	1.3	1.3	0.17	0	ppm	No	Erosion of
								natural
								deposits;
								leaching from
								wood
								preservatives;
								corrosion of
								household
								plumbing
								systems

Regulated Contaminants

Disinfectants	Collection	Highest	Range	MCLG	MCL	Units	Violation	Likely Source
and Disinfection	Date	Level	of					of
By-Products		Detected	Levels					Contamination
			Detected					
Chlorine	2012	3.14	0.10 -	MRDLG	MRDL	ppm	No	Water additive
			3.14	= 4	= 4			used to control
								microbes

Stage 1

Contaminant	Detected	Range of	Goal	Highest	Unit of	Violation	Year	Possible
	Level	Detection	(MCL	Level	Measure			Source
			G)	Allowed				
				(MCL)				
HAA5	RAA 14	14.9 – 17	0	60 ppb	ppb	No	2012	By-product
								of drinking
								water
								disinfection
TTHM	RAA 21	16.4 – 19.1	0	80 ppb	ppb	No	2012	By-product
								of drinking
								water
								disinfection

Stage 2							
Contaminant	Range of Detection	Goal (MC LG)	Highest Level Allowed (MCL)	Unit of Measure	Violation	Year	Possible Source
HAA5	ND – 28.7	0	60 ppb	PPB	No	2012	By-product of drinking water disinfection
TTHM	ND - 43.2	0	80 ppb	PPB	No	2012	By-product of drinking water disinfection

*Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic	Collection	Highest	Range	MCLG	MCL	Units	Violation	Likely Source
Contaminants	Date	Level	of					of
		Detected	Levels					Contamination
			Detected					
Fluoride	2012	0.56	0 – 0.56	4	4.0	ppm	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

2012 Regulated Contaminants Detected Beaufort-Jasper Water & Sewer Authority (#0720003)

Inorganic	Collection	Highest	Range of	MCLG	MCL	Units	Violation	Likely Source
Contaminants	Date	Level	Levels					of
		Detected	Detected					Contamination
Fluoride	2012	0.7	0.44 - 0.74	4	4.0	ppm	No	Erosion of
								natural
								deposits; water
								additive that
								promotes
								strong teeth;
								discharge from
								fertilizer and
								aluminum
								factories.
Nitrate	2012	0.17	0 - 0.17	10	10	ppm	No	Runoff from
(measured as								fertilizer use;
Nitrogen)								leaching from
								septic tanks,
								sewage;
								erosion of
								natural
								deposits.
Radioactive	Collection	Highest	Range of	MCLG	MCL	Units	Violation	Likely Source
Contaminants	Date	Level	Levels					of
		Detected	Detected					Contamination
Gross alpha	2012	14	0-31	0	15	pCi/L	No	Erosion of
excluding								natural
radon and								deposits
uranium								