

Understanding This Report

Hillsborough County Water Resource Services routinely monitors for contaminants in your drinking water according to federal and state laws. The tables in this report only include those compounds that were detected in our routine compliance monitoring for the period of January 1 to December 31, 2009, or the most recent testing as otherwise indicated in the table. The U.S. Environmental Protection Agency requires some compounds to be sampled less frequently than annually, since they do not vary significantly over time.

As water travels over the land or underground, it can pick up substances or contaminants such as minerals, organic and inorganic chemicals, and radioactive substances.

All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.



Terms And Definitions

In the adjacent table, you may find unfamiliar terms and abbreviations. To help you better understand these terms, we've provided the following definitions:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Maximum Contaminant Level (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 (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 (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (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. N/A: Not Applicable.

ND: Means not detected and indicates the substance was not found by laboratory analysis.
Nephelometric Turbidity Unit (NTU): Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. High turbidity can hinder the effectiveness of disinfectants.

Parts Per Billion (ppb) or Micrograms Per Liter (µg/L): One part by weight of analyte to 1 million 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.

PicoCurie Per Liter (pCi/L): Measure of the radioactivity in water.

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

Regarding Unregulated Contaminants: Water Resource Services has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. As present, no health standards for example, maximum contaminant levels have been established for UCs. However, if detected, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791. If you would like a current report of WRS' monitoring for UCs, please call Steve Archer at (813) 272-5977, ext. 43217, or visit our Water Quality Web pages at www.hillsboroughcounty.org/Water.

Water Sources For The South-Central System

In addition to receiving treated groundwater from the WRS Littlefield wellfield which draws its water from the Floridan Aquifer, this system receives a mixture of groundwater, surface water, and desalinated seawater from Tampa Bay Water. Treatment includes coagulation, filtration, ozonation, pH stabilization, chloramination, and the addition of flocculant and a corrosion inhibitor.

South-Central PWS 6290787 - This report includes data collected from January 1 through December 31, 2009

Microbiological Contaminants							
Contaminant and Unit of Measurement	Date of Sampling	MCL Violation?	Highest Monthly Percentage of Positive Samples	MCLG	MCL	Likely Source of Contamination	
Total Coliform Bacteria	Sep 2009	No	1.69	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment	
Radiological Contaminants							
Contaminant and Unit of Measurement	Date of Sampling	MCL Violation?	Highest Single Measurement	Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	Mar, Nov 2009	No	0.40	100	N/A	TT	Soil runoff
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling	MCL Violation?	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	Feb, Jul 2008; Feb, May, Jul 2009	No	4.1	ND - 4.1	0	15	Erosion of natural deposits
Beta/Photon Emitters (pCi/L)	Aug 2007; Sep 2008; Jul 2009	No	5.1	ND - 5.1	0	N/A Established ¹	Decay of man-made and natural deposits
Radium 226 + 228 or combined radium (pCi/L)	Feb, Jul 2008; Jul, Dec 2009	No	1.8	ND - 1.8	0	5	Erosion of natural deposits
Uranium (µg/L)	Jul 2008; Jul, Oct 2009	No	4.1	ND - 4.1	0	30	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Date of Sampling	MCL Violation?	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Antimony (ppb)	Jul 2008; Jan, Mar, May, Jul 2009	No	0.73	ND - 0.73	6	6	Discharge from petroleum refineries; fire retardants; cosmetics; electronics; solder
Arsenic (ppb)	Jul 2008; Jan, Mar, May, Jul, Dec 2009	No	3.9	ND - 3.9	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	Jul 2008; Mar, Jul, Dec 2009	No	0.6394	0.0028 - 0.0394	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	Jul 2008; Feb, Mar, May, Jul, Dec 2009	No	0.566	ND - 0.566	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)	Jul 2008; Jan, Mar, May, Jul, Dec 2009	No	1.0	ND - 1.0	200	200	Discharge from steel/metal factories; discharge from glass and fertilizer factories
Fluoride (ppm)	Jul 2008; Jan-Mar, May, Jul, Dec 2009	No	0.608	ND - 0.608	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes stronger teeth when at optimum levels between 0.7 and 1.3 ppm
Lead (point of entry) (ppb)	Jan-May, Jul, Oct, Dec 2009	No	2.01	ND - 2.01	N/A	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casting and solder
Mercury (inorganic) (ppb)	Mar 2009	No	0.008	ND - 0.008	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from coalfields
Nickel (ppb)	Jul 2008; Jan, Mar, Jul, Dec 2009	No	3.2	ND - 3.2	N/A	100	Pollution from mining and refining operations; natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	Jan-Dec 2009	No	3.60	ND - 3.60	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	Jan-Dec 2009	No	0.10	ND - 0.10	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	Jul 2008; Mar, Jul, Dec 2009	No	18	ND - 18	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharges from mines
Sodium (ppm)	Jul 2008; Jan, Feb, Mar, May, Jul, Dec 2009	No	170	9 - 120	N/A	160	Salt water intrusion; leaching from soil
Stage 1 Disinfectants and Disinfection By-Products							
Contaminant and Unit of Measurement	Date of Sampling	MCL or MRDL Violation?	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Bromate (ppb)	Jan-Dec 2009	No	6.8	ND - 16.3	MCLG = 0	MCL = 10	Byproduct of drinking water disinfection
Chloramines (ppm)	Jan-Dec 2009	No	3.5	0.5 - 5.7	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Halacetic Acids (free) (HAA5) (ppb)	Quarterly 2009	No	12.6	2.57 - 14.7	N/A	MCL = 60	Byproduct of drinking water disinfection
THM (Total Trihalomethanes) (ppb)	Quarterly 2009	No	26.5	18.3 - 50.7	N/A	MCL = 80	Byproduct of drinking water disinfection
Disinfectant and Unit of Measurement							
Date of Sampling	Acute Violation?	Non-Acute Violations?	Level Detected	MRDLG	MCL	Likely Source of Contamination	
Chlorine Dioxide (ppb)	Apr 2009	No	N	693	800	800	Water additive used to control microbes
Contaminant and Unit of Measurement							
Date of Sampling	MCL Violation?	TT	Highest Monthly Average (3 sample set collected in the distribution system)	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
Chlorite (ppm)	Oct 2009	No	0.00723	N/A	0.8	1	Byproduct of drinking water disinfection
Total organic carbon (ppm)	Jan-Dec 2009	No	2.0	1.84-5.07	N/A	TT	Naturally present in the environment
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Date of Sampling	Action Level Exceeded?	Number of Sampling Sites Exceeding the Action Level	MCLG	Action Level	Likely Source of Contamination	
Copper (Tap Water) (ppm)	Jun-Aug 2008	No	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead (Tap Water) (ppb)	Jun-Aug 2008	No	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits	
Secondary Contaminants							
Contaminant and Unit of Measurement	Date of Sampling	MCL Violation?	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Color (color units)	Jul 2008	Yes ¹	25	ND - 25	N/A	15	Naturally occurring organics
Odor (Threshold Odor Number)	Feb, Jun, Aug, Oct 2009	Yes ²	0	1 - 0	N/A	3	Result of disinfectant added to water
¹ Note ¹ : The Color MCL was exceeded at Tampa Bay Water's BUDS Water Treatment Plant. According to the Florida Department of Environmental Protection, no adverse health effects are generally associated with the secondary drinking water contaminants.							
² Note ² : The Odor MCL was exceeded at the Highway Pumping Station which was removed from service in February 2009. The odor was a result of the disinfectant which was required to be added to the water. According to the Florida Department of Environmental Protection, no adverse health effects are generally associated with the secondary drinking water contaminants.							