



## Understanding This Report

The Hillsborough County Public Utilities Department routinely monitors drinking water quality parameters according to federal and state laws. The tables in this report only include those components that were detected in our routine compliance monitoring for the period of January 1 through December 31, 2010, or the most recent testing as otherwise indicated in the table. The U.S. Environmental Protection Agency allows some components to be sampled less frequently than annually, as their concentrations do not vary significantly over time.

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 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.



## 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 addition of 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.

**ND:** Not applicable.

**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 Million (ppm) or Milligrams Per Liter (mg/l):** One part by weight of analyte to 1 million parts by weight of the water sample.

**Parts Per Billion (ppb) or Micrograms Per Liter (ug/l):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Picocuries 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:** The Hillsborough County Public Utilities Department 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. At present, no health standards (for example, maximum contaminant levels) have been established for UCs. However, 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 the Public Utilities Department's monitoring for UCs, please call (813) 272-5977, ext. 43217, or visit our Water Quality Web pages at [www.hillsboroughcounty.org/water](http://www.hillsboroughcounty.org/water).

## Water Sources For The South-Central System

In addition to groundwater drawn from the Floridan Aquifer, the South-Central Water System receives treated groundwater and surface water from Tampa Bay Water. Depending on the source water, water treatment includes desalination, coagulation, settling, filtration, pH stabilization, ozonation, chloramination, and fluoridation.

In 2009, the Florida Department of Environmental Protection performed a Source Water Assessment on this system. A search of the data sources indicated no potential sources of contamination near its source waters. The assessment results are available at [www.dep.state.fl.us/swapp/](http://www.dep.state.fl.us/swapp/).



# 2010 Water Quality Data

### South-Central PWS 6290787 - This report includes data collected from January 1 through December 31, 2010

Microbiological Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation	Highest Monthly Percentage of Positive Samples		MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	Aug 2010	No	1.8		0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation	Highest Single Measurement	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	Jan-Dec 2010	No	0.743	100	N/A	TT	Soil runoff
Radioactive Contaminants							
*EPA considers 50 pCi/L to be the level of concern for Beta Emitters.							
Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	Mar, May, July, Sep 2008; Mar, Apr, July 2010	No	6.2	ND - 6.2	0	15	Erosion of natural deposits
Beta/Photon Emitters (pCi/L)	Aug, Nov 2007; Sep 2008; July, Sep 2009	N/A	5.1	ND - 5.1	0	Not Established*	Decay of natural and man-made deposits
Radium 226 + 228 or combined radium (pCi/L)	Aug 2007; May, July, Sep 2008; Mar, Apr, July 2010	No	1.6	0.3 - 1.6	0	5	Erosion of natural deposits
Uranium (ug/L)	May, July, Sep 2008; Mar, Apr, July 2010	No	1.8	ND - 1.8	0	30	Erosion of natural deposits
Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Antimony (ppb)	May 2010	No	0.097	ND - 0.097	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	May 2010	No	0.316	0.233 - 0.316	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	May 2010	No	0.03671	0.01575 - 0.03671	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	May 2010	No	0.205	0.120 - 0.205	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	May 2010	No	0.751	0.404 - 0.751	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Lead (point of entry) (ppb)	May 2010	No	1.039	0.150 - 1.039	N/A	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing and solder
Nickel (ppb)	May 2010	No	2.569	ND - 2.569	N/A	100	Pollution from mining and refining operations; Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	May 2010	No	0.355	0.174 - 0.355	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	May 2010	No	0.333	ND - 0.333	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	May 2010	No	26.5	10.2 - 26.5	N/A	160	Salt water intrusion; leaching from soil
Stage 1 Disinfectants and Disinfection By-Products							
Disinfectant or Contaminant and Unit of Measurement	Dates 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 2010	No	5.06	ND - 12.9	MCLG = 0	MCL = 10	By-product of drinking water disinfection
Chloramines (ppm)	Jan-Dec 2010	No	3.6	0.6 - 6.7	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	Quarterly 2010	No	10.4	0.73 - 14.9	N/A	MCL = 60	By-product of drinking water disinfection
TTHM (Total Trihalomethanes) (ppb)	Quarterly 2010	No	25.3	18.7 - 28.0	N/A	MCL = 80	By-product of drinking water disinfection
Disinfectant and Unit of Measurement	Dates of Sampling	Acute Violations	Non-Acute Violations?	Level Detected	MRDLG	MRDL (at the entrance to the distribution system)	Likely Source of Contamination
Chlorine Dioxide (ppb)	Jan-Apr 2010	No	No	706	800	800	Water additive used to control microbes
Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation	Highest Monthly Average (3 sample set collected in the distribution system)	Highest Average (3 sample set collected in the distribution system) Following a Daily MCL Exceedance at the Entrance to the Distribution System	MCLG	MCL	Likely Source of Contamination
Chlorite (ppm)	Jan-Apr 2010	No	0.00755	N/A	0.8	1	By-product of drinking water disinfection
Contaminant and Unit of Measurement	Dates of Sampling	TT Violation	Lowest Running Annual Average, Computed Quarterly, of Monthly Removal Ratios	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
Total organic carbon (ppm)	Jan-Dec 2010	No	2.28	1.67 - 3.93	N/A	TT	Naturally present in the environment
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of Sampling	Action Level Exceeded	90 <sup>th</sup> Percentile Result	Number of Sampling Sites Exceeding the Action Level	MCLG	Action Level	Likely Source of Contamination
Copper (Tap Water) (ppm)	June-Aug 2008	No	0.501	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (Tap Water) (ppb)	June-Aug 2008	No	1.09	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits
Secondary Contaminants							
Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Color (color units)	July 2009	Yes <sup>1</sup>	25	ND - 25	N/A	15	Naturally occurring organics

Note<sup>1</sup>: The Color MCL was exceeded at Tampa Bay Water's BUD5 Water Treatment Plant. According to the Florida Department of Environmental Protection, no adverse health effects are generally associated with the secondary drinking water contaminants.