

**City of Tarpon Springs
Consumer Confidence Report (CCR) 2009**

Pinellas County Utilities and The City of Tarpon Springs routinely monitor for contaminants in your drinking water. The data in these tables are based upon the results of monitoring conducted by The City of Tarpon Springs and Pinellas County Utilities.

<u>Microbiological: Contaminants and Unit of Measurement</u>	City of Tarpon Springs			Pinellas County Utilities (PCU)					
	Date of Sample	MCL Violation Y/N	Highest Percentage Monthly Number of positive Samples	Date of Sample	MCL Violation Y/N	Highest Percentage Monthly Number of positive Samples	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	1/09 - 12/09	N	4.76%	1/09 - 12/09	N	1.6%	0	**	Naturally present in the environment
Fecal Coliform and E. Coli				1/09 - 12/09	N	Total No. of Positive Samples for the Year 0	0	0++	Human and animal fecal waste

**For systems collecting fewer than 40 samples per month; presence of coliform bacteria in more than 1 (one) sample collected during a month. For systems collecting at least 40 samples per month: presence of bacteria in 5% or monthly samples.

++ A fecal or E. coli positive followed by proper repeat sampling absent of any contamination does not generate a violation as long as the total coliform rule has not been violated. For a system taking over 40 samples per month, this result is then totaled with any total coliform positive compliance results for the month to determine compliance with the total coliform rule.

Total Trihalomethanes (TTHMs) and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters: For the following parameters monitored under the Stage 1 D/DBP regulations, the level detected is the annual of the quarterly averages: Bromate, Chloramines, Chlorine, Haloacetic Acids, and/or TTHM

<u>Contaminant and Unit of Measurement</u>	City of Tarpon Springs				Pinellas County Utilities (PCU)						
	Date of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range	Date of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	1/09-12/09	N	3.5	3.0-4.4	1/09 - 12/09	No	3.3	1.0 - 5.1	MRDLG=4	MRDL=4.0	Water additive used to control microbes
HAA5 = Haloacetic acid - Parts per billion - ppb	1/09-12/09	N	24.2	1.8 - 67.5	1/09 - 12/09	No	22.9	4.2 - 49.9	NA	MCL=60	By-product of drinking water chlorination.
TTHM = Totaltrihalomethanes - Parts per billion - ppb	1/09-12/09	N	34.81	11.6 - 71.6	1/09 - 12/09	No	45.1	12.5 - 77.6	NA	MCL=80	By-product of drinking water chlorination.

<u>LEAD and COPPER (TAP WATER): Contaminants and Unit of Measurement</u>	City of Tarpon Springs				Pinellas County Utilities (PCU)						
	Date of sample (yr.)	Action Level Violation Y/N	90 th percentile results	No. of sampling sites exceeding the AL	Date of Sampling (mo./yr.)	Action Level Violation Y/N	90 th percentile results	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper - parts per million - ppm	8/08	N	0.45	0 - sites above the action level	06/08-08-08	N	0.604	0 - sites above the action level	1.3	1.3	Corrosion of household plumbing
Lead - parts per billion - ppb	8/08	N	2.3	0 - sites above the action level	06/08-08-08	N	1.0	0 - sites above the action level	0	15	Corrosion of household plumbing

* Quarterly sampling was performed through 2009. Dates for sampling for the four quarters were - 2/09, 5/09, 7/09 and 12/09

The City of Tarpon Springs is pleased to present to you this year's Annual Water Quality Report. The city's drinking water meets federal and state requirements. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a dependable supply of drinking water that meets federal and state regulations. 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 water source is supplied by Tampa Bay Water (TBW), Pinellas County Keller Treatment Plant and the city's four production water treatment facilities. The City's four production water treatment plant's water source is obtained from groundwater from the Floridan aquifer, while Regional Supplier (TBW) obtains its water from both ground and surface water. All water, both purchased and produced, is chloraminated for disinfection purposes. The city purchases approximately 75 to 90% of its water from Pinellas County and the city's four production water treatment plants produce the other 10 to 25%. We want our valued customers to be informed about their water utility. If you want to learn more, or if you have any questions about this report or concerns about your water utility, please contact The City of Tarpon Springs at (727) 942 - 5606. If you would like to attend the City of Tarpon Springs Board of Commissioners meetings, regular scheduled meetings are held on the 1st and 3rd Tuesday of every month at 6:30 pm at Tarpon Springs City Hall. A copy of Tampa Bay Water full data report is available by contacting the City or Tampa Bay Water, if you would like to request a copy of the Tampa Bay Water 2009 CCR, please contact them at 727-796-2355 or www.tampabaywater.org

In order to ensure that tap water is safe to drink, the 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. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. As water travels over land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. 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 Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

The City of Tarpon Springs 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 2009**. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. **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 disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791)**

Lead in Drinking Water

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. Pinellas County Utilities 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 or at <http://www.epa.gov/safewater/lead>.

REQUIRED ADDITIONAL HEALTH INFORMATION

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 storm water 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 storm water 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 storm water runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

SOURCEWATER ASSESSMENT

In 2008 the Department of Environmental Protection performed a Source Water Assessment of the City of Tarpon Springs Water system which is a ground water source. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our WTP/wells. There are eight potential sources of contamination identified for this system with a range from 16.7 to 300 susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from the City of Tarpon Springs, Public Services Department, Water Division.

In 2009 the Department of Environmental Protection performed a Source Water Assessment on Pinellas County Water system which is a ground water source. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from the Pinellas County Utilities.

In 2009 the Department of Environmental Protection performed a Source Water Assessment on Tampa Bay Water system which is a surface water source. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of Tampa Bay Waters surface water intakes, wells, and reservoir. The assessment results indicated TBW as a high potential due to surface water. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from Tampa Bay Water.

*Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency

City of Tarpon Springs											
Radiologicals	WTP #1 Grosse		WTP #2 Tarpon		WTP #8 (5D)		WTP #3 Highland				
	Date of Sample	MCL Violation Y/N	**Level Detected	MCL Violation Y/N	**Level Detected	MCL Violation Y/N	**Level Detected	Date of Sample	MCL Violation Y/N	**Level Detected	Range
Gross Alpha - Pico curies per liter – pCi/l	*2009	N	7.03	N	8.48	N	8.8	10/09	N	4.1	4.1-12
Radium 226 - Pico curies per liter – pCi/l	*2009	N	1.35	N	1.43	N	1.4	10/09	N	0.4	0.4-1.7
Radium 228 - Pico curies per liter – pCi/l	*2009	N	0.1	N	ND	N	0.2	10/09	N	0.3	ND-0.4
Uranium – Pico curies per liter - pCi/l	*2009	N	1.99	N	3.32	N	2.25	10/09	N	2.3	1.3-4.86
Radium 226 + 228 or combined radium - Pico curies per liter- pCi/L											
Inorganic : Contaminants and Unit of Measurement											
Antimony parts per billion-ppb											
Arsenic parts per billion – ppb	1/09	N	1.5	N	1.6	N	3	12/09	N	ND	ND-3.0
Barium - Parts per million – ppm	1/09	N	0.018	N	0.027	N	0.012	12/09	N	0.017	0.011-0.026
Chromium - Parts per billion - ppb											
Fluoride-Parts per million-ppm	1/09	N	0.024	N	ND	N	0.034	12/09	N	0.094	ND-0.094
Nickel - Parts per billion - ppb											
Nitrate [as Nitrogen] parts per million ppm	1/09	N	1.7	N	4.3	N	0.52	12/09	N	3.7	0.52-4.3
Nitrite (as Nitrogen) (ppm)	1/09	N	ND	N	ND	N	ND	12/09	N	ND	ND
Beryllium - parts per billion - ppb	1/09	N	0.2	N	0.1	N	0.1	12/09	N	ND	ND-0.2
Sodium – parts per million – ppm	1/09	N	90	N	92	N	63	12/09	N	85	63-92
Selenium – parts per billion - ppb	1/09	N	ND	N	ND	N	ND	12/09	N	3.7	ND-3.7

Terms and Abbreviations:

In this table, 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:

- Action Level (AL) – the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- Chloramine (NH2CL) - A compound made by chemically combining chlorine with ammonia. Monochloramine, one of three possible combinations, is the desired chloramine form for disinfection of potable water.
- Chlorine, (Cl) - An element used in gaseous form that readily combines with other elements in water to disinfect potable water.
- Data Qualifier Code, (I) - I: Indicates the reported value is between the laboratory detection limit and laboratory quantitation limit.
- Haloacetic Acids, (HAA5) - A group of disinfection by-products formed as a result of the chemical disinfection of water.
- Initial Distribution System Evaluation, (IDSE) - An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAA5). Water systems will use results from the IDSE, in conjunction with Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for Stage 2 DBPR.
- Maximum Contaminant Level (MCL) – The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water.
- Maximum Contaminant Level Goal (MCLG) – The “Goal” (MCLG) 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 Disinfection 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.
- Millirems per year (mrem/yr) – measure of radiation absorbed by the body.
- Million fibers per liter (MFL) – million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- Nephelometric Turbidity Unit (NTU) – nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- No Goal Established, (NGE) - No maximum contaminant level goal (MCLG) established for this contaminant.
- Not Detected (ND) – Not detected; indicates that the substance was not found by the laboratory analysis.
- 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 \$10,000.00.
- Parts per billion (ppb) or Micrograms per liter (micrograms/L) – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.00.
- Parts per trillion (ppt) or Nanograms per liter (nanograms/L) – one part per trillion corresponds to one minute in 2,000,000 years, or one penny in \$10,000,000,000.00.
- Parts per quadrillion (ppq) or Pico grams per liter (picograms/L) – one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.00.
- Pico curies per liter (pCi/L) – Pico curies per liter is a measure of radioactivity in water.
- Primary Contaminants: - Health-related standards established by federal and state agencies.
- Secondary Contaminants: - Constituents which affect taste, odor, and appearance (color). These are not considered a health concern.
- Variations and Exemptions (V&E) – state or EPA permission not to meet an MCL or treatment technique under certain conditions.

Pinellas County Utilities						
Radiological: Contaminants and Unit of Measurement						
Date of Sample	MCL Violation Y/N	**Level Detected	Range	MCLG	MCL	Likely Source of Contamination
				0	15	Erosion of natural deposits
				0	5	Erosion of natural deposits
				0	5	Erosion of natural deposits
				30	30	Erosion of natural deposits
3/08	No	0.9	ND - 0.9	0	5	Erosion of natural deposits
Inorganic : Contaminants and Unit of Measurement						
12/09	N	0.1	ND - 0.1	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
12/09	N	0.5	0.3 - 0.5	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
12/09	N	0.0181	0.0117 - 0.0181	2	2	Discharge of drilling wastes; discharge from metal refineries: erosion of deposits.
12/09	N	0.5	0.4 - 0.5	100	100	Discharge from steel and pulp mills; erosion of natural deposits
12/09	N	0.75	0.67 - 0.75	4	4	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.
12/09	N	1.5	0.3 - 1.5	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
3/09 & 12/09	N	0.16	ND - 0.16	10	10	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
				1	1	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
				4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
12/09	N	52.7	8.48 - 52.7	N/A	160	Salt-water intrusion; leaching from soil.
12/09	N	1	1	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Treatment Technique (TT) – a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Total Trihalomethanes, (TTHM) - A group of disinfection by-products formed as a result of the chemical disinfection of water.

Health Effects Language.

- (23) Sodium. – The Florida Department of Environmental Protection (DEP) has set the drinking water standards for sodium at 160 parts per million (ppm) to protect individuals that are susceptible to sodium-sensitive hypertension or diseases that cause difficulty in regulating body fluid volume. Sodium is monitored so that individuals who have been placed on sodium (salt) restricted diets may take into account the sodium in their drinking water. Drinking water contributes only a small fraction (less than 10 percent) to the overall sodium intake. Sodium levels in drinking water can be increased by ion-exchange softeners at water treatment facilities or certain point-of-use treatment devices. If you have been placed on a sodium diet, please inform your physician that out water contains 8.64-80 ppm of sodium.
- Total Trihalomethanes and Stage 1 Disinfection by-product Parameters:
- (77) Chloramines: Some people who use water containing chloramines well in the excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.
- Radioactive Contaminants:
- (5) Alpha emitters. - 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 may have an increased risk of getting cancer.
- (6) Combined Radium 226/228. - Some people who drink water containing radium 226/228 in excess of the MCL over many years may have an increased risk of getting cancer.
- (7) Uranium – Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
- Inorganic Contaminants:
- (9) Arsenic – Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
- (11) Barium. - Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
- (12) Beryllium. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
- (13) Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney failure.
- (16) 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. Fluoride in drinking water at half the MCL or more may cause mottling of children’s teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
- (20) Nitrate. - Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill, and if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.
- (22) Selenium – Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.