

# CITY OF HOMESTEAD - 2005 WATER QUALITY MEASUREMENTS

Substance	Units	Finished Water Measurement	Maximum Contaminant Level	Maximum Contaminant Level Goal	Likely Source of Substance
<b>Inorganic Substances</b>					
Copper (at the tap) <sup>1,2</sup>	ppm	0.24 (3 home out of 60 (5%) exceeded AL)	AL = 1.3	AL = 1.3	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride	ppm	0.96	4	4	Water additive to promote strong teeth
Lead (at the tap) <sup>1,2</sup>	ppb	.002 (1 home out of 60 (1.6%) exceeded AL)	AL = 15	AL = 0	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate <sup>3</sup>	ppm	1.95 (1.70 to 2.30)	10	10	Run-off from fertilizer use; leaching from septic tanks; erosion of natural deposits
Sodium	ppm	22.2	160	NE	Salt water intrusion, leaching from soil
<b>Secondary Substances</b>					
Chloride	ppm	66.0	250	NE	Natural occurrence from soil leaching
Sulfate	ppm	23.4	250	NE	
Zinc	ppm	0.15	5	NE	
<b>Radionuclide*</b>					
Gross Alpha *	pCi/L	2.9	15	0	Erosion of natural deposits
<b>TTHMs and Stage I Disinfection By-Products</b>					
Contaminant and Unit of Measurement	Level Detected	Range of Results	MCL or MRDL	MCLG or MRDLG	By-product of drinking water chlorination
Chlorine (ppm) <sup>3</sup>	1.8	(1.4 to 2.3)	4.0	N/A	
TTHM (total) <sup>3</sup>	14.39	(8.89 to 17.85)	80	N/A	
Trihalomethanes (ppb)	14.39	(8.89 to 17.85)	80	N/A	
Haloacetic acids 5-(ppb) <sup>3</sup>	9.99	(5.14 to 22.02)	60	N/A	
<p><sup>1</sup> The measurement and Maximum Allowable Levels are the 90<sup>th</sup> percentile value of the most recent round of sampling sites. If the 90<sup>th</sup> percentile value does not exceed the AL (less than 10% of homes have levels above the AL), the system is in compliance.</p> <p><sup>2</sup> Lead and Copper testing was performed in 2003. Due to no presence of lead or copper, the City was granted a waiver for testing until the year 2006.</p> <p><sup>3</sup> The lowest and highest values measured during the year are in parenthesis. The number outside the parenthesis is the average value.</p> <p>* These test results were from 2002.</p>					

## Where Does Your Water Come From?

Like most cities in South Florida, the source of the water delivered to your tap is the Biscayne Aquifer, a groundwater source. This aquifer is an underground geological formation where water is stored and extends from a few feet to approximately 200 feet below the ground. The water is pumped from the aquifer at two well fields located at the City's two water treatment plants (Wittkop Park and Harris Field). Once the water is pumped out of the wells, chlorine is added to disinfect and fluoride is added to aid in dental protection. After the water is treated it is stored in elevated water towers prior to entering the water distribution system.

## Definition of Terms in the Table

- AL (Action Level) – Is the concentration of a contaminant, which if exceeded, triggers a treatment or other requirement, which a water system must follow.
- Maximum Contaminant Level (MCL) – The MCL is 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 "Goal" is 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.
- NE (Not Established) – No goals have been set for this constituent.
- NTU (Nephelometric Turbidity Unit) – Used to measure cloudiness in drinking water.
- pCi/L (Picocuries per Liter) – A measure of radioactivity.
- ppb (Parts per Billion) – One gallon in one billion gallons.
- ppm (Parts per Million) – One gallon in one million gallons.
- ppt (Parts per Trillion) – One gallon in one trillion gallons.
- ton (Threshold odor number) – Used to measure odor of drinking water.

## Your Water is Tested for Your Protection

The City tests the quality of the water prior to and after water treatment. The water is also tested at various locations within the water distribution system.

Testing is a necessary activity to ensure that the treatment process is properly controlled and that the public receives water that complies with all regulatory standards. All laboratory results are reported to the Health Department of Miami-Dade

County. Testing involves measuring the concentration of constituents in the water. Numerous constituent concentrations are measured either annually, quarterly, monthly, or on a daily basis.

## The 2005 Water Quality Measurements Table Presents Test Results for Detected Substances

This table reports the concentrations of those substances that were detected in your drinking water. The dozens of other constituents that were tested for but not detected are not included in the table. The table also includes the maximum concentration level that the EPA and the State of Florida allow.

## Source Water May Contain Substances That Are Not Completely Removed After Treatment

As with all sources of drinking water, water from the Biscayne Aquifer contains substances (also called contaminants) that may not be completely removed during water treatment. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and can pick up substances resulting from the presence of animals or from human activity.

Substances that may be present in source water include:

- Microbial substances, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic substances, such as salts and metals, which can be naturally-occurring or result from urban stormwater 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 stormwater runoff, and residential uses.
- Organic chemical substances, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive substances, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (EPA) prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for

constituents in bottled water, which must provide the same level of protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these 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 (800-426-4791).



### Some People May Be More Vulnerable to Contaminants Than Others

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).

### Information About Lead

There is no lead in the water as it leaves the water treatment plants. Testing throughout the City's distribution system, including a sample of 60 homes, has not produced any readings above the Action Levels as designated by the EPA. However, drinking water can cause lead to leach from plumbing systems in your home. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes because of your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

### Information About Disinfection By-Products

Water leaving the Wittkop Park and the Harris Field Water Treatment Plants and water in the distribution system was tested for disinfection-byproducts. The results of the tests are reported in the Water Quality Measurement Table.

### Have Questions? Call the Source

For more information about Homestead water quality, please call Mr. Richard Grant, Treatment Supervisor at (305) 224-4790. Visit our website at [www.cityofhomestead.com](http://www.cityofhomestead.com).

### Why is Homestead Providing this Report?

As of September 1998, all water utilities in the United States are required by the EPA to provide these water quality reports to their customers on an annual basis.

### You Can Participate in Decisions that Affect Water Issues

Decisions regarding your water are made at the Water Division monthly meetings. For information regarding meeting schedules and times, please call the City of Homestead Public Works and Services Department at (305) 224-4770.

### Need Extra Copies?

Building owners and businesses are encouraged to share this report with non-billed water users. If you need extra copies of this report, please call the City of Homestead Public Works and Services Department at (305) 224-4770.

**We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life and our children's future.**

**We at the City of Homestead work around the clock to provide top quality water to every tap said Curtis K. Ivy, Jr., City Manager.**



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*Pride In our Community*

# CITY OF HOMESTEAD

## Water Quality Report



The City of Homestead takes great pride in providing first class services to its residents, and providing safe drinking water is no exception. To ensure the high quality water its residents expect, the City operates its own water treatment, storage and distribution systems. In compliance with the Environmental Protection Agency (EPA) Safe Drinking Water Act, the City of Homestead is proud to provide you with the annual Water Quality Report for calendar year 2005.

This Water Quality Report contains information about the drinking water supplied to your tap during calendar year 2005. Included is a table that provides results from Homestead's drinking water.

**We are pleased to report that the City of Homestead's drinking water exceeds all Federal and State water quality standards.**

**Este informe contiene informacion importante sobre el agua que usted bebe diariamente. Si no lo entiende, busque a alguien que se lo traduzca o le explique su contenido. Para mas informacion, llame al (305) 224-4770.**