

WATER QUALITY REPORT



CITY OF HIALEAH - DEPARTMENT OF WATER AND SEWERS

Your drinking water is **SAFE!**



The City Hialeah Department of Water and Sewers is pleased to provide our customers with our Annual Water Quality Report. The publishing of this report is required each year by the Safe Drinking Water Act and State of Florida regulations. This report also serves as a reference with important information on the quality of water we deliver, while providing you with contacts and telephone numbers you may need from time to time. The report contains:

- Your drinking water source • Required Consumer Confidence Report (CCR) Statement Addressing Lead in Drinking Water • Special Note to At-risk Populations • Expected Drinking Water Contaminants • Mayor's Message
- What Should I Know About Certain Contaminants? • Have Questions About This Report?
- Detailed Information on Analyzed Contaminants • Water Quality Terminology Used in this Report

YOUR DRINKING WATER SOURCE: THE BISCAYNE AQUIFER

We purchase our water from Miami-Dade County. Miami-Dade obtains its water from the Biscayne Aquifer, an underground geological formation where water is stored. It is the sole source of fresh water for Miami-Dade County. It continues to be a reliable source since the early 1920's. Water from the Biscayne Aquifer is pumped to treatment facilities throughout Miami-Dade County, including the Hialeah Water Treatment Plant and the John E. Preston Water Treatment Plant. On average, more than 330 million gallons per day are provided to County residents. Hialeah residents use approximately 24 million of gallons per day.

REQUIRED CONSUMER CONFIDENCE REPORT (CCR) STATEMENT ADDRESSING 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. City of Hialeah - Department of Water & Sewers 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 from 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead/index.html>.

SPECIAL NOTE TO AT-RISK POPULATIONS

While the Safe Drinking Water Act is intended to protect all consumers throughout their lifetime, some people may be more vulnerable to infections from drinking water than the general population. These "at-risk" populations include immunocompromised persons, such as people with cancer undergoing chemotherapy, HIV/AIDS or other immune system disorders, those who have undergone organ transplants; and in some cases elderly people and infants. These individuals should seek advice from their health care providers about drinking tap water. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water hotline at 1-800-426-4791.

EXPECTED DRINKING WATER CONTAMINANTS

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 stormwater 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 stormwater runoff and residential uses.
- D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- E) Radioactive contaminants, 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 Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establishes limits for contaminants in bottled water, which must provide the same protection for public health. 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 EPA's Safe Drinking Water Hotline at 1-800-426-4791, or by visiting the agency website at www.epa.gov/safewater.



JULY 2010

MAYOR'S MESSAGE

I am pleased to report once again that the City's water supply meets or exceeds all Federal and State safe water guidelines for the 2009 reporting period. Our annual Water Quality Report presents information regarding the quality of the water we provide our residents on a daily basis. We continue to meet our stated goal of providing a safe and dependable supply of drinking water to all our residents and businesses alike. The Safe Drinking Water Act (SDWA), and its 1996 amendments, ensure that the public's health and safety are protected through the drinking water made available for public consumption. Our drinking water meets or exceeds all safe drinking water standards established by the Florida Department of Environmental Protection (FDEP), the Florida Department of Health and the United States Environmental Protection Agency (EPA).

As previously reported, the City, in partnership with Miami-Dade County and the South Florida Water Management District, continues its work in the construction of a Reverse Osmosis Water Treatment Plant with a capacity to produce 10 million gallons (MGD) of potable water daily. In the past year, the City completed a test production well to the Floridan Aquifer, several monitoring wells, the construction of two deep injection wells for the disposal of the brine, and will soon start construction of a pump station for the deep wells. Site preparation work is scheduled to begin in July 2010. Preliminary pilot testing has also been completed. We are currently in the final phase of selection for the design-build-operate contractor, and anticipate having an executed contract by the end of the summer. The Floridan Aquifer is a much deeper source than the Biscayne Aquifer. It carries water with higher salinity, necessitating the use of the reverse osmosis treatment process that utilizes engineered filtering cells under pressure to remove impurities and foreign materials from the source water. This plant will ensure that our City will have an adequate supply of potable water to meet all of the planned demands for the next 20 years and beyond.



JULIO ROBAINA
MAYOR

HAVE QUESTIONS ABOUT THIS REPORT

Please contact the City of Hialeah's
Department of Water and Sewers

305-556-7383

OR YOU CAN SEE THE REPORT AT
www.hialeahfl.gov



WHAT SHOULD I KNOW ABOUT CERTAIN CONTAMINANTS?

ALPHA EMITTERS is a measure of radioactivity due to naturally occurring minerals in ground-water. The MCL excludes the radioactivity contributed by either radon or uranium. Sampling of our water alpha emitters conducted in 2008 was 3.4 Picocurie per liter (pCi/L). The MCL is 15 pCi/L.

ARSENIC - While your drinking water meets EPA's reduced standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effect of low levels of arsenic. Arsenic is a mineral known to cause an increased risk of cancer in humans at high concentrations and is linked to other health effects, such as damage to the skin and circulatory system.

BERYLLIUM - A metal hazardous to human health when inhaled as an airborne pollutant. It is discharged by machine shops, ceramic and propellant plants, and foundries.

CADMIUM (CD) - A heavy metal that accumulates in the environment.

CHLORAMINES as a group, are generally recognized as potent respiratory irritants. These compounds form when household bleach and ammonia are mixed and leads to poisoning.

CHLORINE DIOXIDE is a powerful oxidizing agent that can decompose into chlorite. In the absence of oxidizable substances and in the presence of alkali, it dissolves in water, decomposing with the slow formation of chlorite and chlorate.

COLIFORM BACTERIA are very commonly found in the environment and in the digestive tract of animals. While rarely harmful, Coliform bacteria in drinking water is an indicator that the water may also contain harmful microorganisms. In 2009 the total Coliform sample was 0.5%. (The MCL is 5%).

COMBINED RADIUM is radium's most common isotope (atoms whose nuclei have the same number of protons but different number of neutrons) with a half-life of 1,622 years. It is used in cancer radiotherapy, as a neutron source for some research purposes, and as a constituent of luminescent paints. It naturally occurs in some drinking water sources. Some people who drink water containing radium -226 or -228 in excess of the MCL over many years may have an increased risk of getting cancer.

LEAD AND COPPER are naturally occurring metals, which are generally found at very low levels in source water. However, these levels can increase when water contacts plumbing materials that contain lead, copper, or brass. Infants and young children are more vulnerable to lead in drinking water than the general population. Concerned customers can take an extra precaution to protect children from lead leaked from faucets by running the water for a few seconds and using the water for something other than drinking. This is especially important if the water has been sitting in the pipes for a few hours or more. These same precautions also help to give you the best tasting water.

There are no detectable levels of lead in the water supplied by the MDWASD. It is possible that lead levels at your home may be higher than at other homes in the community because of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested by an independent laboratory. Additional information is available from Safe Drinking Water Hotline (1-800-426-4791).

NITRATE - Although the level of nitrate (refer to the table on water quality data) is consistently below the health effect level, the EPA requires the following information be included in this report: "Nitrate in drinking water at levels above 10ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue-baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall of agriculture activity. If you are caring for an infant, you should ask advice from your health care provider."

RADON - Radon 222, or radon for short, is a colorless, odorless gas that occurs naturally in soil, air and water. Radon is formed from the radioactive decay products of natural uranium that is found in many soils. Most radon in indoor air comes from the soils below the foundation of the home, and in some locations can accumulate to dangerous levels in the absence of proper ventilation. In most homes, the health risk from radon in drinking water is very small compared to the health risk from radon in indoor air. For more information, call the EPA'S Radon Hotline at 1-800-SOS-RADON.

WHAT TO LEARN MORE ABOUT WATER?

This report is available on our web site at www.hialeahfl.gov

We welcome your comments and opinions about this report and will be happy to answer any questions you may have. Please direct your comments or questions to the Department directly at the following telephone number: 305-556-7383 Monday - Friday 8:30 a.m. to 5:00 p.m.

FOR MORE INFORMATION ABOUT CONTAMINANTS AND POTENTIAL HEALTH EFFECTS,
PLEASE CALL THE
EPA SAFE DRINKING WATER HOTLINE AT 1-800-426-4791

CITY OF HIALEAH 2009 WATER QUALITY REPORT

PARAMETER	FEDERAL MCL (a)	FEDERAL GOAL (b)	STATE MCL	YEAR TESTED	MAIN SYSTEM	MAJOR SOURCES
MICROBIOLOGICAL CONTAMINANTS						
Total Coliform Bacteria (c)	5%	0	5%	2009	0.5%	Naturally present in the environment
DISINFECTION BY PRODUCTS						
Total Trihalomethanes (ppb)(d)	80	N/A	80	2009	25 (4 - 102)	Byproduct of drinking water chlorination
Haloacetic Acids (ppb) (d)	60	N/A	60	2009	36 (11 - 63)	Byproduct of drinking water chlorination
DISINFECTANTS						
Chloramines (ppm) (e)	MRDL=4.0	MRDLG=4	MRDL=4.0	2009	2.4 (ND - 4.4)	Water additive used to control microbes
Chlorine (ppm) (e)	MRDL=4.0	MRDLG=4	MRDL=4.0	2009	N/A	Water additive used to control microbes
VOLATILE ORGANIC CONTAMINANTS						
cis-1, 2-Dichloroethylene (ppb)	70	70	70	2008 (g)	ND	Discharge from industrial chemical factories
INORGANIC CONTAMINANTS						
Antimony (ppb)	6	6	6	2008 (g)	ND	Discharge from fire retardants, electronics, solder
Arsenic (ppb)	10	N/A	10	2008 (g)	1.8 (ND - 1.8)	Erosion of natural deposits
Barium (ppm)	2	2	2	2008 (g)	0.009 (0.006 - 0.009)	Erosion of natural deposits
Copper (ppm) (f) (at tap)	AL=1.3	1.3	AL = 1.3	08/09 (g)	0.07, 0 homes out of 73 (0%) exceeded AL	Corrosion of household plumbing systems
Fluoride (ppm)	4.0	4	4.0	2008 (g)(h)	0.7 (0.2 - 0.7)	Erosion of natural deposits; water additive which promotes strong teeth
Lead (ppb) (f) (at tap)	AL = 15	0	AL = 15	08/09 (g)	2.8, 1 home out of 73 (1.4%) exceeded AL	Corrosion of household plumbing systems
Nickel (ppb)	NE	N/A	100	2008 (g)	ND	Corrosion of bronze
Nitrate (as N) (ppm)	10	10	10	2009	0.13 (0.01 - 0.13)	Erosion of natural deposits;
Nitrite (as N) (ppm)	1	1	1	2009	0.008 (ND -0.008)	Runoff from fertilizer use
Sodium (ppm)NE	NE	N/A	160	2008 (g)	43 (25 - 43)	Erosion of natural deposits and sea water
RADIOACTIVE CONTAMINANTS						
Alpha Emitters (pCi/L)	15	0	15	2008 (g)	3.4 (ND - 3.4)	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	5	2008 (g)	0.7 (0.2 - 0.7)	Erosion of natural deposits
Uranium (ug/L)	30	0	30	2008 (g)	ND	Erosion of natural deposits

WATER QUALITY TERMINOLOGY USED IN THIS REPORT

- (a) MCL = Maximum Contaminant Level
- (b) Federal Goal = MCLG = Maximum Contaminant Level Goal
- (c) The MCL for total coliform bacteria states that drinking water must not show the presence of coliform bacteria in ≥5% of monthly samples. A minimum of 390 samples for total coliform bacteria testing are collected each month from the main distribution system in order to demonstrate compliance with regulations.
- (d) A total of 48 samples for Total Trihalomethane and Haloacetic Acid testing are collected per year from the main distribution system in order to demonstrate compliance with State regulations. Compliance is based on a running annual average.
- (e) Compliance is based on a running annual average, computed quarterly from monthly samples collected during total coliform bacteria testing.
- (f) 90th percentile value reported. If the 90th percentile value does not exceed the AL (i.e., less than 10% of the homes have levels above the AL), the system is in compliance and is utilizing the prescribed corrosion control measures.
- (g) The 08/06 data presented for the Main System is from the most recent testing conducted in accordance with regulations. These systems are under reduced monitoring which only requires testing every 3 years.
- (h) Fluoride testing to demonstrate compliance with State regulations is required every 3 years in accordance with the State's monitoring framework. However, fluoride levels are monitored daily for the Main System treatment plants where fluoride is added to promote strong teeth.

ABBREVIATIONS AND NOTES

- N/A = Not Applicable
- ND = Not Detected
- NE = None Established
- pCi/L = picoCuries per Liter
- ppb = Parts per billion or micrograms per liter (ug/L)
- ppm = Parts per million or milligrams per liter (mg/L)
- () = Ranges (low-high) are given in parenthesis where applicable
- The value preceding the parenthesis is the highest detected level reported for the monitoring period except for disinfection by products and disinfectants, where the running annual average is reported.

ABBREVIATION/SYMBOL	DEFINITION
MCLG Maximum Contaminant Level Goal	The level of contaminant in drinking water below that there is no known or expected risk to health.
MCL Maximum Contaminant Level	The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MRDLG Maximum Residual Disinfectant Level Goal	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.
MRDL Maximum Residual Disinfectant Level	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.
TT Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
AL Action level	Action level. The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

* THE CITY OF HIALEAH OBTAINS ALL OF ITS WATER FROM MIAMI-DADE COUNTY. THIS INFORMATION IS PROVIDED BY MIAMI-DADE COUNTY.

2009 RADON DATA SUMMARY

PARAMETER	FEDERAL GOAL	FEDERAL MCL	STATE MCL	YEAR TESTED	MAIN SYSTEM	MAJOR SOURCES
RADON (pCi/L)	NE	NE	NE	2008	174 (22 - 174)	Naturally occurring in soil and rock formations

NE = None Established