

# WATER QUALITY REPORT

## City of Hialeah - Department of Public Works

**2015**

The City of Hialeah's Department of Public Works 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 serves as a reference with important information on the quality of water we deliver. It also provides you with contacts and telephone numbers you may need from time to time.

### **YOUR DRINKING WATER SOURCE: THE BISCAYNE AND UPPER FLORIDAN AQUIFERS**

We purchase most of our water from Miami-Dade County. In addition, the new Reverse Osmosis Water Treatment Plant provides 7.5 million gallons of water per day to serve the residents of the City of Hialeah and Miami-Dade County. Miami Dade obtains our water from the Biscayne Aquifer, an under-ground geological formation where freshwater is stored. It has been a reliable water source since the early 1920s. Water from the Biscayne Aquifer is pumped to treatment facilities, including the Hialeah Water Treatment Plant and the John E. Preston Water Treatment Plant, owned and operated by Miami-Dade County. The Hialeah Reverse Osmosis Water Treatment plant, jointly owned by the City of Hialeah and Miami-Dade County, obtains water from the Floridan Aquifer, a much deeper aquifer with consistently high quality source water. Hialeah residents use approximately 24 million gallons of water 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. Primarily, lead in drinking water comes from materials and components associated with service lines and home plumbing. The City of Hialeah Department of Public Works 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 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 at 1-800-426-4791 or online 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 susceptible to microbial contaminants than the general population. These "at-risk" populations include persons with a weakened immune system, 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 to find out if special precautions should be taken, such as boiling your water. USEPA/CDC guidelines on appropriate means to lower 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**.

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) also has adopted regulations that establish limits for contaminants in bottled water, which must provide the same protection to the public. 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](http://www.epa.gov/safewater)**.

### **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 may 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, petroleum production, gas stations, urban stormwater runoff and septic system.
- E) Radioactive contaminants, which can be naturally occurring or be the results of oil and gas production and mining activities.



**JULY 2016**

## Mayor's Message



Carlos Hernandez  
Mayor

Dear Valued Customers,

This Consumer Confidence Report is issued annually to provide details about the quality of our City's potable water. I am pleased to announce that the water tested by our Public Works Department meets or exceeds the standards set forth by the United States Environmental Protection Agency, the Florida Department of Environmental Protection, and the Florida Department of Health.

We recognize the significant level of trust you place in the able administration of our water resources every time you turn on the tap. Because we recognize that quality drinking water is not only a basic need but an essential part of a strong and healthy environment, economic growth and development in our City, we are committed to delivering only the highest quality drinking water to our community. To ensure the safety of the water we drink and use, our Department of Public Works, a proven leader in the water supply industry, routinely monitors the levels of contaminants in your drinking water according to federal, state and local laws, rules and regulations. Except where indicated otherwise, this water quality report is based on the results of monitoring performed during the period of January 1, 2015 through December 31, 2015.

We hope you also find this report valuable for the information on the source of our water and operations of our distribution system. We urge you to put into practice the tips on efficient use of our water for the sake of our environment's sustainability and to ensure our City remains a great place to live, work and raise a family. On our end, we will continue to improve upon our production and delivery systems to keep true to our commitment to quality and to ensure that our customers have superior water for generations to come.

Sincerely,

## PRECAUTIONARY BOIL WATER NOTICES

As part of ongoing efforts to protect the health of our communities, the State of Florida has developed rules that regulate how water utilities respond to water main breaks. According to the rules, if a water main breaks and its interior is exposed to groundwater, soil, or other foreign matter, a Precautionary Boil Water Notice must be issued in the affected area. As the name implies, this is a precautionary measure. Generally, a notice is not necessary for most water leaks.

We understand that precautionary boil water notices can be a major inconvenience and we make every effort to avoid them. In the rare event that a significant break does occur, notices are distributed immediately for the most part. A notice is lifted after 48 hours and only after bacteriological tests confirm the water is safe to drink. We care about your safety and encourage you to follow the precautionary notices should one be issued in your area.

## WHAT DOES A 20% REDUCTION

*in water use look like?*



### AVERAGE DAILY USE

The average resident in the City of Hialeah uses 100 gallons of water per day. Here are some easy ways to reduce water use. Find the right combination for you to reduce consumption by 20% or 20 gallons a day.



INSTALL AERATORS ON BATHROOM FAUCETS

*saves*



**1.2 GALLONS**  
per person/day



WASH ONLY FULL LOADS OF CLOTHES

*saves*



**15-45 GALLONS**  
per load



TURN OFF WATER WHEN BRUSHING TEETH OR SHAVING

*saves*



**10 GALLONS**  
per person/day



TAKE FIVE MINUTE SHOWERS INSTEAD OF 10 MINUTE SHOWERS

*saves*



**12.5 GALLONS**  
with a water efficient shower head



FIX LEAKY TOILETS

*saves*



**30-50 GALLONS**  
per day/toilet



INSTALL EFFICIENT, WATERSENSE-LABELED SHOWER HEADS

*saves*



**1.2 GALLONS**  
per minute



INSTALL A HIGH-EFFICIENCY WATERSENSE-LABELED TOILET (1.28 GALLON PER FLUSH)

*saves*



**19 GALLONS**  
per person/day

### HAVE QUESTIONS ABOUT THIS REPORT?



Please contact the  
City of Hialeah Dept. of Public Works  
305-556-7383  
or visit us on the web at  
[www.hialeahfl.gov](http://www.hialeahfl.gov)

**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 2015 WATER QUALITY DATA

PARAMETER	FEDERAL MCL (a)	FEDERAL GOAL (b)	STATE MCL	YEAR TESTED	MCL VIOLATION	MD-WASD	HIALEAH RO	MAJOR SOURCES
<b>MICROBIOLOGICAL CONTAMINANTS</b>								
Total Coliform Bacteria (c)	5%	0	5%	15 (h)	N	0.7%	ND	Naturally present in the environment
<b>STAGE 2 DISINFECTION BY-PRODUCTS</b>								
Total Trihalomethanes (ppb) (d)	80	N/A	80	15 (h)	N	71 (5 - 79)	0.25 U	By - product of drinking water chlorination
Haloacetic Acids (ppb) (d)	60	N/A	60	15 (h)	N	37 (15 - 51)	0.37 U	By - product of drinking water chlorination
<b>DISINFECTANTS</b>								
Chloramines (ppm) (f)	MRDL=4.0	MRDLG=4	MRDL=4.0	15 (h)	N	2.5 (ND - 4.6)	0.66	Water additive used to control microbes
Chlorine (ppm) (f)	MRDL=4.0	MRDLG=4	MRDL=4.0	15 (h)	N	N/A	2.4	Water additive used to control microbes
<b>SYNTHETIC ORGANIC CONTAMINANTS</b>								
Diquat (ppb)	20	20	20	15 (h)	N	0.21 U	0.27 U	Runoff from herbicide use
<b>INORGANIC CONTAMINANTS</b>								
Antimony (ppb)	6	6	6	15 (h)	N	0.1 (ND - 0.1)	0.50 U	Discharge from fire retardants, electronics, solder
Arsenic (ppb)	10	0	10	15 (h)	N	1.3 (0.5 - 1.3)	0.50 U	Erosion of natural deposits
Barium (ppb)	2	2	2	15 (h)	N	0.007 (0.002 - 0.007)	2.4	Erosion of natural deposits
Chromium (ppb)	100	100	100	15 (h)	N	0.001 (ND - 0.001)	2.5 U	Erosion of natural deposits
Copper (ppm) (g) (at tap)	AL = 1.3	1.3	AL = 1.3	15 (h)	N	0.07, 0 homes out of 116 (0%) exceeded AL	0.00050 U	Corrosion of household plumbing systems
Fluoride (ppm)	4	4	4	15 (h)	N	1.0 (0.4 - 1.0)	1.20	Erosion of natural deposits; water additive which promotes strong teeth
Lead (ppb) (f) (at tap)	AL = 15	0	AL = 15	15 (h)	N	4.0, 3 homes out of 116 (3.0%) exceeded AL	0.50 U	Corrosion of household plumbing systems
Nickel (ppb)	NE	N/A	100	15 (h)	N	ND	2.50 U	Corrosion of bronze
Nitrate (as N) (ppm)	10	10	10	15 (h)	N	0.11 (0.01 - 0.11)	0.025 U	Erosion of natural deposits; Runoff from fertilizer use
Nitrite (as N) (ppm)	1	1	1	15 (h)	N	0.01	0.025 U	Erosion of natural deposits; Runoff from fertilizer use
Selenium (ppb)	50	50	50	15 (h)	N	7.7 (ND - 7.7)	ND	Erosion of natural deposits
Sodium (ppm)	NE	N/A	160	15 (h)	N	53 (36 - 53)	44.8	Erosion of natural deposits and sea water
<b>RADIOACTIVE CONTAMINANTS</b>								
Alpha Emitters (pCi/L)	15	0	15	15 (h)	N	ND	1.51 U	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	5	15 (h)	N	0.4 (ND - 0.4)	0.942 U & 0.689 U	Erosion of natural deposits
Uranium (µg/L)	30	0	30	15 (h)	N	1.3 (0.1 - 1.3)	ND	Erosion of natural deposits
<b>2014 RADON DATA SUMMARY</b>								
RADON (pCi/L)	NE	NE	NE	2015	N	242 (ND - 242)	ND	Naturally occurring in soil and rock formations

## 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 420 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. This is the value which precedes the parentheses  
 (e) A total of 32 samples for Total Trihalomethane and Haloacetic Acid testing are collected per year from the Main distribution system to demonstrate compliance with State regulations. Compliance is based on a locational running annual average.  
 (f) Compliance is based on a running annual average, computed quarterly from monthly samples collected during total coliform bacteria testing.  
 (g) 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  
 (h) The data presented for the Main system is from the most recent testing conducted for these parameters in accordance with regulations.  
 (i) 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.  
 (j) Acceptance Test - 14 days process to verify that the water treatment plant and its parts work according to the contract and that the quality of the water produced complies with the state and the Federal regulations.

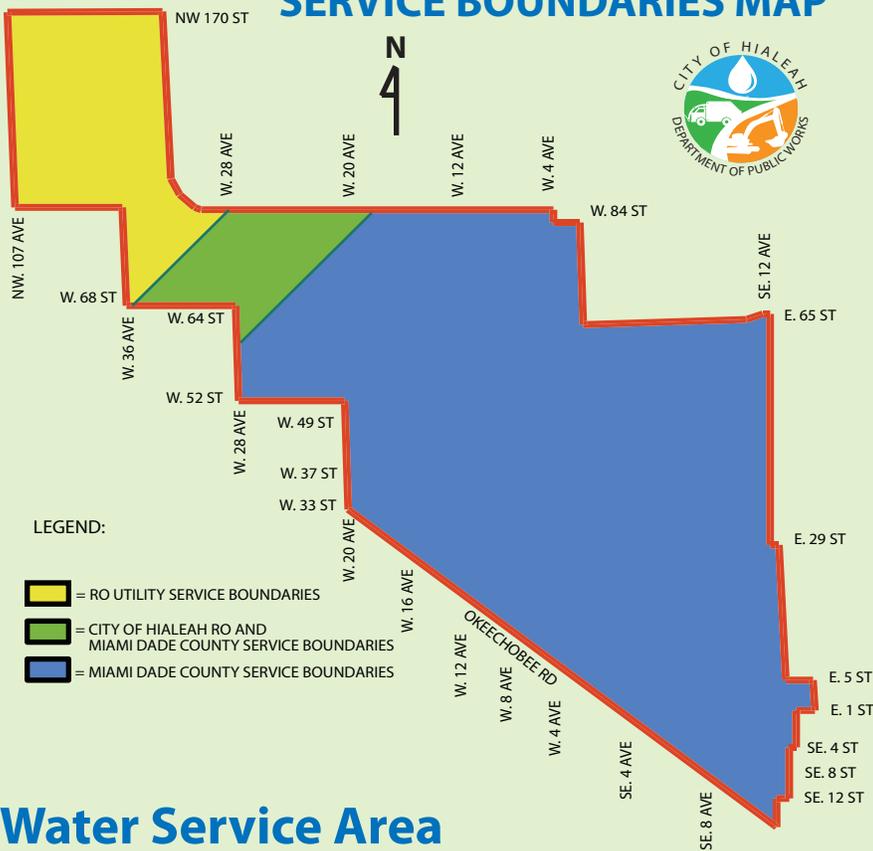
## ABBREVIATIONS AND NOTES

AL = Action Level  
 MRDL = Maximum Residual Disinfectant Level  
 MRDLG = Maximum Residual Disinfectant Level Goal  
 N/A = Not Applicable  
 ND = Not Detected  
 NE = None Established  
 pCi/L = picoCuries per Liter  
 ppb = Parts per billion or micrograms per liter (µg/L)  
 ppm = Parts per million or milligrams per liter (mg/L)  
 U = Under

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 The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

( ) = Ranges are given in parentheses where applicable. The value preceding parentheses is the highest detected level reported for the monitoring period except for disinfection byproducts and disinfectants, where the running annual average or locational running average is reported.

## SERVICE BOUNDARIES MAP



## Status of the Hialeah RO Water Treatment Plant

The design-build-operate contractor for the Hialeah Reverse Osmosis Treatment Plant is continuing to work toward satisfying certain design-build requirements of its service contract with the City. The contractor operated the plant during 2015 while working to resolve various plant mechanical and reliability issues unrelated to water quality. These issues will need to be resolved in order for the contractor to close out the design-build phase of its service contract with the City. However, all water produced by the plant and introduced to the distribution systems since the commencement of operations has met the water quality requirements of applicable law. The Hialeah Reverse Osmosis Treatment Plant is currently providing quality water to the City of Hialeah and Miami-Dade County customers.

## Water Service Area

The City of Hialeah Department of Public Works serves a population of over 230,000 people in a 23 square-mile area. Our customers are located within the City of Hialeah, as well as portions of unincorporated Miami-Dade County. We also have emergency interconnects to the municipalities of Hialeah Gardens and Miami Lakes. The Reverse Osmosis Water Treatment Plant serves residents located in the north west area of Hialeah providing 7.5 million gallons of water per day. The south-east area of Hialeah obtains water from the John E. Preston Water Treatment Plant owned by Miami-Dade County.

## A FEW CLOSING THOUGHTS

Water quality isn't just about what is done at a water treatment plant; it's also about what you do with the water you use. You've probably heard that you shouldn't flush bugs down the toilet because it's a waste of water, but there's other stuff that shouldn't be flushed for other very good reasons. Unused or unwanted medications should not be flushed down toilets or sinks. While water treatment can remove materials, extra treatment processes are expensive and we all pay for them. While these materials make their way through the natural system, they can also have a negative effect on wildlife. We protect the environment and the wildlife when we properly dispose of medications. Please do not flush them down the sink or toilet. Conserve both the quality and quantity of our water. For more information, please visit: <http://www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm>

## DID YOU KNOW

The City of Hialeah Department of Public Works in a joint effort with the Hialeah Fire Department, maintains 4,223 fire hydrants throughout the water distribution system. Each year the City flushes a portion of the hydrants to promote optimum operating conditions for the system. Periodic flushing of the water pipelines removes sediment and scale and maintains the cleanliness of the water system, assuring high quality water reliability.



**Your Annual Water Quality Report is Now Available Online**

In an effort to be environmentally responsible, we are making this report available on the Internet. Log on today to view this report at: [www.hialeahfl.gov](http://www.hialeahfl.gov)