

# MIAMI-DADE WATER & SEWER DEPARTMENT

## 2013 WATER QUALITY DATA

PARAMETER	FEDERAL MCL (a)	FEDERAL GOAL (b)	STATE MCL	YEAR TESTED	MAIN SYSTEM	SOUTH DADE WATER SUPPLY SYSTEM	AVENTURA OEFFLER-NORWOOD	MAJOR SOURCES
<b>MICROBIOLOGICAL CONTAMINANTS</b>								
Total Coliform Bacteria (c)	5%	0	5%	13 (h)	0.2%	0%	0%	Naturally present in the environment
<b>STAGE 1 DISINFECTION BYPRODUCTS</b>								
Total Trihalomethanes (ppb) (d)	80	N/A	80	13 (h)	N/A	25 (7 - 72)	N/A	Byproduct of drinking water chlorination
Haloacetic Acids (ppb) (d)	60	N/A	60	13 (h)	N/A	7 (2 - 18)	N/A	Byproduct of drinking water chlorination
<b>STAGE 2 DISINFECTION BYPRODUCTS</b>								
Total Trihalomethanes (ppb) (e)	80	N/A	80	13 (h)	72 (3 - 83)	N/A	(13 - 17)	Byproduct of drinking water chlorination
Haloacetic Acids (ppb) (e)	60	N/A	60	13 (h)	37 (16 - 45)	N/A	(6 - 15)	Byproduct of drinking water chlorination
<b>DISINFECTANTS</b>								
Chloramines (ppm) (f)	MRDL=4.0	MRDLG=4	MRDL=4.0	13 (h)	2.3 (ND - 4.9)	N/A	3.3 (0.6 - 4.0)	Water additive used to control microbes
Chlorine (ppm) (f)	MRDL=4.0	MRDLG=4	MRDL=4.0	13 (h)	N/A	1.8 (0.4 - 3.0)	N/A	Water additive used to control microbes
<b>VOLATILE ORGANIC CONTAMINANTS</b>								
Dichloromethane (ppb)	5	0	5	13 (h)	ND	ND	1.8 (1.4 - 1.8)	Discharge from pharmaceutical and chemical factories
<b>INORGANIC CONTAMINANTS</b>								
Antimony (ppb)	6	6	6	11 (h)	ND	2 (1 - 2)	0.8 (ND - 0.8)	Discharge from fire retardants, electronics, solder
Arsenic (ppb)	10	N/A	10	11 (h)	1	1	ND	Erosion of natural deposits
Barium (ppm)	2	2	2	11 (h)	0.01	0.03 (0.02 - 0.03)	0.004 (0.003 - 0.004)	Erosion of natural deposits
Chromium (ppb)	100	100	100	11 (h)	0.2 (ND - 0.2)	ND	ND	Erosion of natural deposits
Copper (ppm) (g) (at tap)	AL = 1.3	1.3	AL = 1.3	11/12 (h)	0.06, 0 homes out of 56 (0%) exceeded AL	1.2, 2 homes out of 37 (5%) exceeded AL	0.09, 0 homes out of 103 (0%) homes exceeded the AL	Corrosion of household plumbing systems
Fluoride (ppm)	4.0	4	4.0	11 (h)(i)	0.6 (0.2 - 0.6)	0.2 (0.1 - 0.2)	0.8 (0.6 - 0.8)	Erosion of natural deposits; water additive which promotes strong teeth
Lead (ppb) (g) (at tap)	AL = 15	0	AL = 15	11/12 (h)	2.8, 0 homes out of 56 (0%) exceeded AL	1.6, 0 homes out of 37 (0%) exceeded AL	3.6, 1 home out of 103 (0.97%) exceeded the AL	Corrosion of household plumbing systems
Nickel (ppb)	NE	N/A	100	11 (h)	ND	1 (ND - 1)	ND	Corrosion of bronze
Nitrate (as N) (ppm)	10	10	10	13 (h)	0.14 (0.01 - 0.14)	7 (1 - 7)	ND	Erosion of natural deposits; Runoff from fertilizer use
Nitrite (as N) (ppm)	1	1	1	13 (h)	0.01 (ND - 0.01)	ND	ND	Erosion of natural deposits; Runoff from fertilizer use
Selenium (ppb)	50	50	50	11 (h)	ND	1	ND	Erosion of natural deposits
Sodium (ppm)	NE	N/A	160	11 (h)	41 (26 - 41)	27 (13 - 27)	39 (34 - 39)	Erosion of natural deposits and sea water
<b>RADIOACTIVE CONTAMINANTS</b>								
Alpha Emitters (pCi/L)	15	0	15	11 (h)	2.4 (ND - 2.4)	5.2 (ND - 5.2)	N/A	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	5	11 (h)	0.6 (ND - 0.6)	1.8 (0.6 - 1.8)	2.3 (1.6 - 2.3)	Erosion of natural deposits
Uranium (µg/L)	30	0	30	11 (h)	ND	0.9 (ND - 0.9)	0.0004 (0.0003 - 0.0004)	Erosion of natural deposits

ABBREVIATIONS & NOTES				
<p>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)                      ( ) = Ranges (low - high) are given in parentheses where applicable.                      The value preceding the 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 annual average is reported.</p>	<p>(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 (55 samples from the South Dade Water Supply distribution system) in order to demonstrate compliance with regulations.                      (d) A total of 20 samples for Total Trihalomethane and Haloacetic Acid testing are collected per year from the South Dade Water Supply 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 (6 from the Aventura distribution system) in order to demonstrate compliance with State regulations. Compliance is based on a locational running annual average. This is the value which precedes the parentheses.                      (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 and South Dade System is from the most recent testing conducted for these parameters in accordance with regulations. The Aventura System was tested in 2013.                      (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.</p>			