

## MIAMI-DADE WATER & SEWER DEPARTMENT 2016 WATER QUALITY DATA

PARAMETER	FEDERAL MCL (a)	FEDERAL GOAL (b)	STATE MCL	YEAR TESTED	MAIN SYSTEM	MCL VIOL Y/N	SOUTH DADE WATER SUPPLY SYSTEM	MCL VIOL Y/N	NMB WATER	MCL VIOL Y/N	MAJOR SOURCES
<b>MICROBIOLOGICAL CONTAMINANTS</b>											
Total Coliform Bacteria (positive samples until March 31, 2016)	5%	0	5%	16 (h)	0.2%	NO	0%	NO	0%	NO	Naturally present in the environment
Total Coliform Bacteria (Beginning April 1, 2016)	TT	0	TT	16 (h)	0	NO	0	NO	0	NO	Naturally present in the environment
<b>STAGE 2 DISINFECTION BYPRODUCTS</b>											
Total Trihalomethanes (ppb) (d)(e)	80	N/A	80	16 (h)	48 (6-56)	NO	56 (11-77)	NO	19.3 (7.8-33.4)	NO	Byproduct of drinking water chlorination
Haloacetic Acids (ppb) (d)(e)	60	N/A	60	16 (h)	39 (8-45)	NO	15 (2-17)	NO	13 (9.4-16.9)	NO	Byproduct of drinking water chlorination
<b>DISINFECTANTS</b>											
Chloramines (ppm) (f)	MRDL=4	MRDLG=4	MRDL=4	16 (h)	2.6 (ND-4.5)	NO	N/A	N/A	3.5 (0.7-4.0)	NO	Water additive used to control microbes
Chlorine (ppm) (f)	MRDL=4	MRDLG=4	MRDL=4	16 (h)	N/A	N/A	1.7 (0.2-3.3)	NO	N/A	N/A	Water additive used to control microbes
<b>INORGANIC CONTAMINANTS</b>											
Antimony (ppb)	6	6	6	16 (h)	0.2 (ND-0.2)	NO	0.7 (0.2-0.7)	NO	ND	NO	Discharge from fire retardants, electronics, solder
Arsenic (ppb)	10	0	10	16 (h)	1.5 (0.8-1.5)	NO	1.3 (0.6-1.3)	NO	ND	NO	Erosion of natural deposits
Barium (ppm)	2	2	2	16 (h)	0.006 (0.005-0.006)	NO	0.02 (0.01-0.02)	NO	0.003	NO	Erosion of natural deposits
Chromium (ppb)	100	100	100	16 (h)	ND	NO	0.7 (0.4-0.7)	NO	ND	NO	Erosion of natural deposits
Copper (ppm) (g) (at tap)	AL = 1.3	1.3	AL = 1.3	16 (h)	0.06, 0 homes out of 124 (0%) exceeded AL	NO	0.97, 1 home out of 36 (3%) exceeded AL	NO	0.10, 0 homes out of 91 exceeded AL	NO	Corrosion of household plumbing systems
Fluoride (ppm)	4	4	4	16 (h)	0.9 (0.2-0.9)	NO	0.1	NO	0.56 (0.53-0.56)	NO	Erosion of natural deposits; water additive which promotes strong teeth
Lead (ppb) (at POE)	15	15	15	16 (h)	ND	NO	1.6 (0.16-1.6)	NO	ND	NO	Corrosion of household plumbing systems
Lead (ppb) (g) (at tap)	AL = 15	0	AL = 15	16 (h)	2.1, 1 home out of 124 (1%) exceeded AL	NO	1.4, 2 homes out of 36 (6%) exceeded AL	NO	3.4, 3 homes out of 91 (3%) exceeded AL	NO	Corrosion of household plumbing systems
Nitrate (as N) (ppm)	10	10	10	15 (h)	0.37 (0.01-0.37)	NO	6 (1-6)	NO	ND	NO	Erosion of natural deposits; Runoff from fertilizer use
Nitrite (as N) (ppm)	1	1	1	16 (h)	0.04 (ND-0.04)	NO	ND	NO	ND	NO	Erosion of natural deposits; Runoff from fertilizer use
Selenium (ppb)	50	50	50	16 (h)	ND	NO	0.9 (ND-0.9)	NO	ND	NO	Erosion of natural deposits
Sodium (ppm)	NE	N/A	160	16 (h)	46 (26-46)	NO	30 (17-30)	NO	40 (35-40)	NO	Erosion of natural deposits and sea water
<b>Synthetic Organic</b>											
Hexachlorocyclo-pentadiene (ppb)	50	50	50	16 (h)	ND	NO	ND	NO	0.022 (ND-0.022)	NO	
<b>RADIOACTIVE CONTAMINANTS</b>											
Alpha Emitters (pCi/L)	15	0	15	16 (h)	ND	NO	9.1 (ND-9.1)	NO	ND	NO	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	5	16 (h)	ND	NO	0.9 (ND-0.9)	NO	ND	NO	Erosion of natural deposits
Uranium (µg/L)	30	0	30	16 (h)	1.2 (ND-1.2)	NO	9.5 (0.7-9.5)	NO	ND	NO	Erosion of natural deposits

ABBREVIATIONS & NOTES											
AL = Action Level					(a) MCL = Maximum Contaminant Level						
MRDL = Maximum Residual Disinfectant Level					(b) Federal Goal = MCLG = Maximum Contaminant Level Goal						
MRDLG = Maximum Residual Disinfectant 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.						
N/A = Not Applicable					(d) 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.						
ND = Not Detected					(e) A total of 16 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 locational running annual average. This is the value which precedes the parentheses.						
NE = None Established					(f) Compliance is based on a running annual average, computed quarterly from monthly samples collected during total coliform bacteria testing.						
pCi/L = picoCuries per Liter					(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.						
POE = Point of Entry to the Distribution System					(h) The data presented for the Main System, South Dade System and North Miami Beach System is from the most recent testing conducted for these parameters in accordance with regulations.						
ppb = parts per billion or micrograms per liter (µg/L)					(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.						
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.											
TT = Treatment Technique											